

# AGRICULTURAL OUTLOOK

March 1987

Economic Research Service  
United States Department of Agriculture

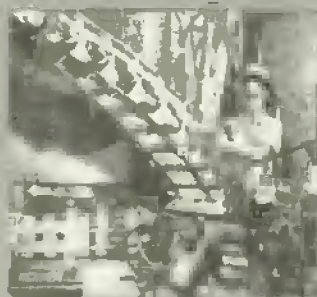


*Agriculture and the 100th Congress*



# AGRICULTURAL OUTLOOK

March 1987/AO-128



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# In Brief . . . Changes in the 100th Congress, Debt at Risk

Financial stress in U.S. agriculture has been widespread during some parts of every decade since World War I. The Great Depression began for agriculture in 1920 and continued until World War II. During the late 1940's, the 1950's, and the 1960's, two-price programs, acreage allotments, marketing quotas, and the Soil Bank were used in various times to help improve life on the farm while disposing of surpluses and limiting Government outlays. Even the boom in exports in the early 1970's provided only temporary respite. By 1978, before the current slide in asset values began, some farmers were protesting Government policies by blockading Washington streets with tractors. Thus, the financial stress in agriculture during the 1980's, while severe, continues a decades-old trend.

Cigarette consumption in the United States may have fallen about 2 percent to an estimated 584 billion in 1986. Consumption has fallen 4 of the last 5 years, and is down 9 percent from 1981 after growing steadily from the early 1900's. If current trends continue, consumption might decline 20 to 25 percent by the year 2000 to around 450 billion.

Net farm income for 1986 likely ranged between \$28 and \$32 billion, in line with the final 1985 figure of \$30.5 billion. A small increase to \$29 to \$34 billion is expected in 1987, because lower production expenses and larger direct Government payments will outweigh further declines in cash receipts. In 1987, production expenses are expected to drop over \$1 billion to \$124 billion, and Government payments could rise \$3 billion to \$16 billion.

Out of nearly 670,000 U.S. farmers with production or sales of at least \$40,000 in 1985 who were operating in 1986, about 102,000 are experiencing



ing financial stress severe enough to threaten their ability to continue farming. Those farmers, many of whom will remain in business, owed about \$33 billion of the \$94 billion of business debt owed by commercial-size operators in early 1986. However, it is estimated that nearly half the Nation's 2.2 million farms, most of them small, are virtually debt-free.

Of that \$33 billion, it is estimated that lenders may risk losing approximately one-fourth, or \$6-\$10 billion, even if the farmers' assets were sold. Losses by the Farmers Home Administration on loans to these commercial farmers could total about \$2.5-\$3 billion; by the Farm Credit System, about \$2 billion. About 86 percent of these potential losses are from approximately 44,000 operators who were technically insolvent in early 1986.

Productivity in U.S. agriculture grew an average of 2 percent a year from 1948 to 1984, but during 1979-84, productivity growth accelerated to nearly 6 percent a year. Incentives to reduce production costs per unit of output explain much of the improvement. During the next decade,

these economic incentives will likely continue. Therefore, productivity in U.S. agriculture could grow at an annual rate of 2-4 percent.

In compensation for lower U.S. feed grain exports because of Spain's and Portugal's entry into the Common Market, the European Community (EC) has agreed that Spain will import 2 million metric tons of corn and 300,000 tons of sorghum annually from outside the EC. If imports do not reach this level by reducing tariffs, the grain will be imported directly by EC intervention agencies.

Under the 4-year agreement, the United States will share this quota with other exporters. Tariffs on 26 other agricultural products and industrial goods were also reduced, and the EC lifted a requirement that 15 percent of Portugal's grain imports come from the rest of the EC.

The agreement brought the United States and the EC back from the brink of another trade confrontation because of the lost feed grain exports.

The U.S. economy slipped quietly into 1987, after posting a 2.5-percent growth rate in 1986. However, the improvement in the real net export deficit—an inflation-adjusted measure of the net flow of goods and services between the U.S. and foreign economies—indicates that growth in 1987 could be brisk by year's end.

The 100th Congress has convened, with several proposals related to agricultural policy. One idea is to allow producers to vote on whether or not to establish mandatory production controls. Another proposal would decouple the production requirement from income support payments. These two positions provide the end points between which agricultural debate will likely occur in 1987. The Administration has suggested reducing target prices and expanding the 50/92 provision of the 1985 Farm Act.





## Agricultural Economy

### FINANCIAL STRESS IN LONG-TERM PERSPECTIVE

Financial stress in U.S. agriculture has been widespread during some parts of every decade since World War I. The Great Depression began for agriculture in 1920 and continued until World War II. During the late 1940's, the 1950's, and the 1960's, two-price programs, acreage allotments, marketing quotas, and the Soil Bank were used in various times to help improve life on the farm while disposing of surpluses and limiting Government outlays. Even the boom in exports in the early 1970's provided only temporary respite.

By 1978, before the current slide in asset values began, some farmers were protesting Government policies by blockading Washington streets with tractors. Thus, the financial stress in agriculture during the 1980's, while severe, continues a decades-old trend.

Events such as Government agricultural policy, the relative strengths of currencies, oil prices, or droughts and floods do influence financial conditions. However, the persistent causes of financial stress are agricultural labor productivity, which is rising faster than consumption, and too many resources devoted to global agricultural production in relation to effective demand.

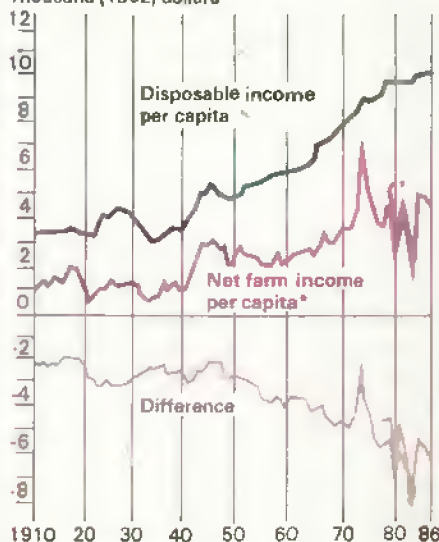
For decades, real disposable income per capita in the United States has

exceeded real net farm income per farm resident. The gap between these two incomes averaged about \$2,500 (1982 dollars) during the 1930's, and has widened by about \$100 per year since then. In 1986, disposable income per capita in the United States climbed to about \$10,800 (1982 dollars), while net farm income per farm resident was only about half that.

The gap between non-farm and farm incomes has contributed to the exodus from farming since the start of World War II. The U.S. farm population stayed above 30 million until 1942, despite low farm incomes, because of a lack of off-farm opportunities. Since 1942, the farm population has fallen every year except for 1946-47 and 1972. The average decline per year since 1948 has been about 520,000, although the rate of decline dropped to 140,000 per year between 1978 and 1986. The U.S. farm population in 1986 was about 5.2 million.

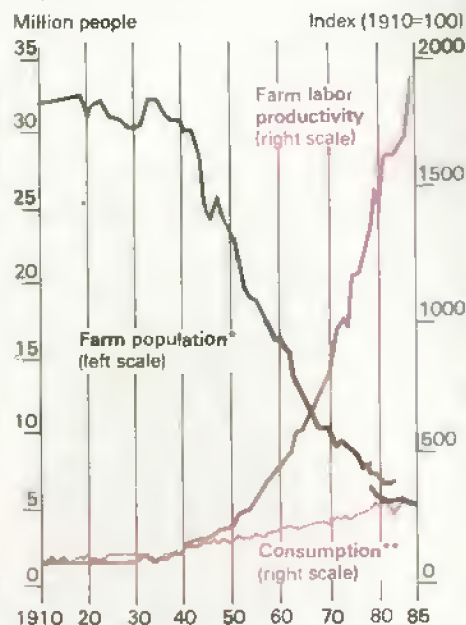
With a diminishing farm-labor pool beginning in the 1940's, and technological advances, farmers have invested in labor-saving technology. An index of farm output per hour of work rose from 138 in 1939 (1910=100) to 1,938 by 1985—a fourteen-fold increase in 47 years. Furthermore, the rate of increase in labor productivity shows

Farmers' Per Capita Incomes Are Dropping Further Below National Averages  
Thousand (1982) dollars



\*Definition of a farm changed in 1978.

Rising Labor Productivity Helps Farm Population Decline



\*Old definition of farms until 1983 New definition 1978-86.

\*\*Index of farm output used as a proxy for consumption. Accounting for recent surpluses would increase the difference between productivity and consumption.

no signs of abating. Meanwhile, consumption of U.S.-produced food and fiber has risen only threefold.

During the same years, 1939-85, an index of farm output per unit of all inputs rose from 119 (1910=100) to only 295—indicating that farmers are substituting other inputs for labor. Moreover, total input use has declined very little since the 1940's, despite the persistence of crop surpluses.

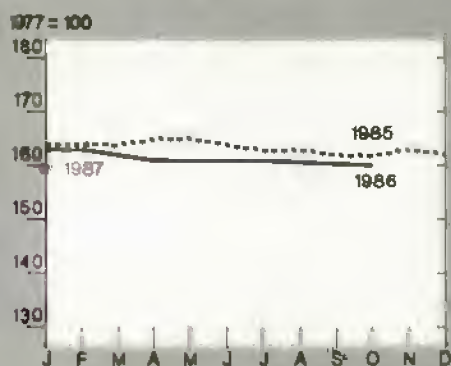
With labor productivity growth outstripping consumption growth, and the use of other inputs declining only a little, fewer farmers and farm workers are needed each year. This is reflected in relatively low per capita farm incomes and in farm financial stress, which even Government price and income supports cannot entirely alleviate.

Will financial stress and the decline in the farm population continue indefinitely until all the world's food is produced by a single farmer? Probably not, because there are diminishing returns to scale. Nevertheless, it is important to note that the decline in the farm population since World War II has been steady, almost inexorable, and without respect to changing Government agricultural policies. [Terry Townsend (202) 786-3313]

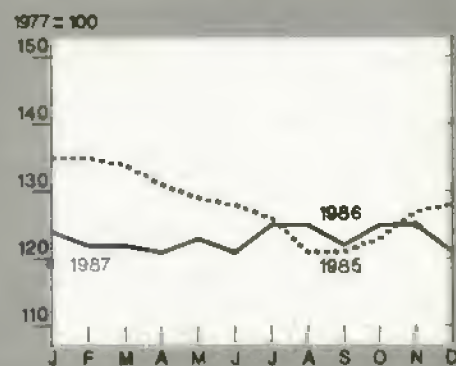


# Prime Indicators of the U.S. Agricultural Economy

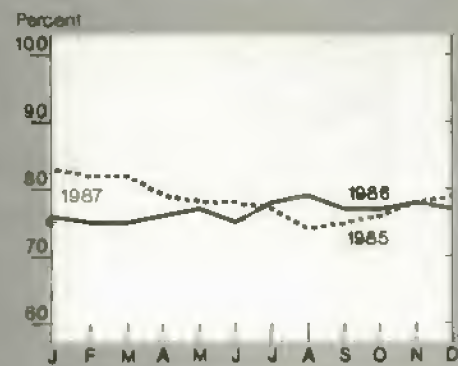
Index of prices paid by farmers<sup>1</sup>



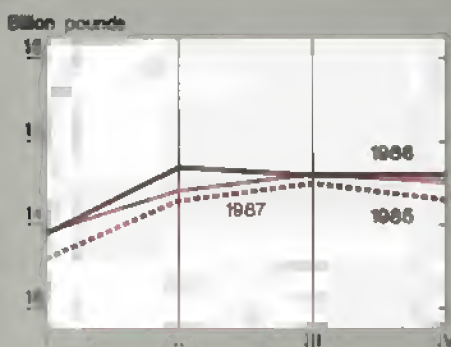
Index of prices received by farmers<sup>2</sup>



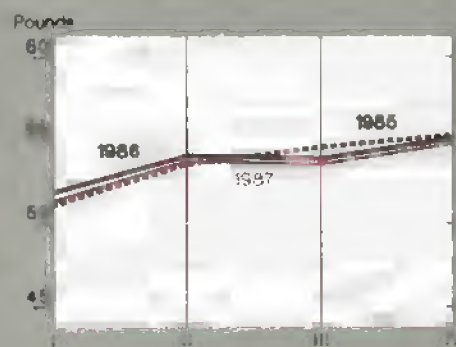
Ratio of prices received to prices paid



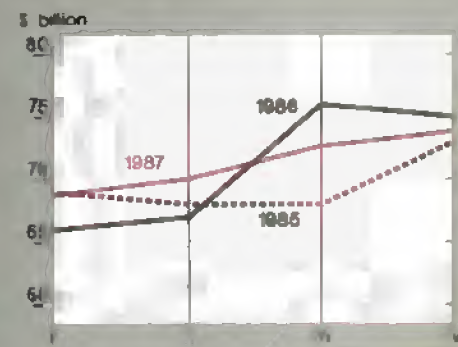
Red meat & poultry<sup>3</sup>  
production



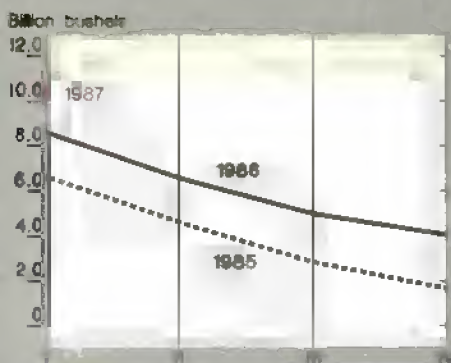
Red meat & poultry  
consumption, per capita<sup>3,4</sup>



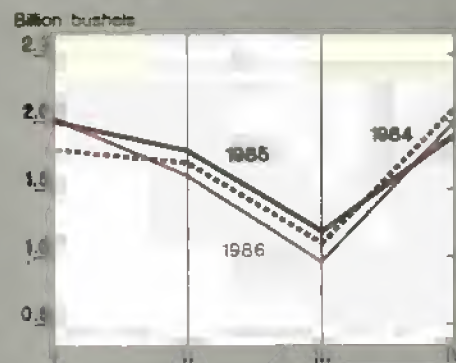
Cash receipts from  
livestock & products<sup>5</sup>



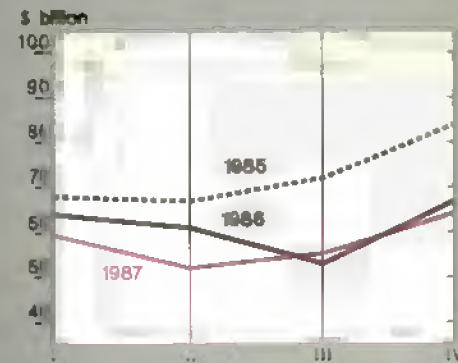
Corn beginning stocks<sup>6</sup>



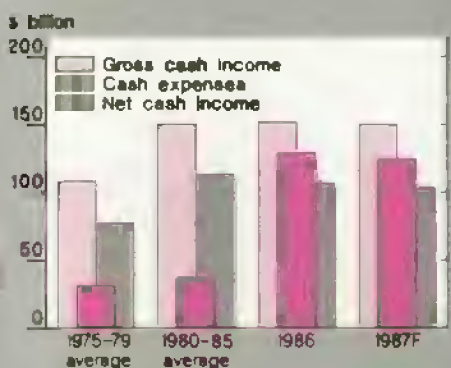
Corn disappearance<sup>6</sup>



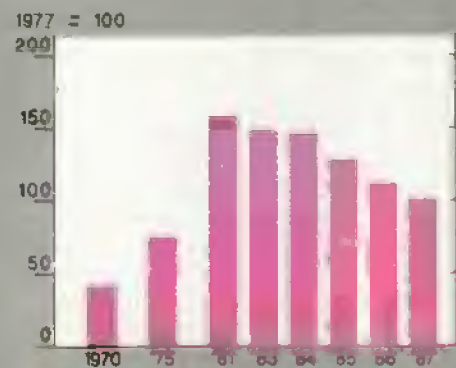
Cash receipts from crops<sup>5</sup>



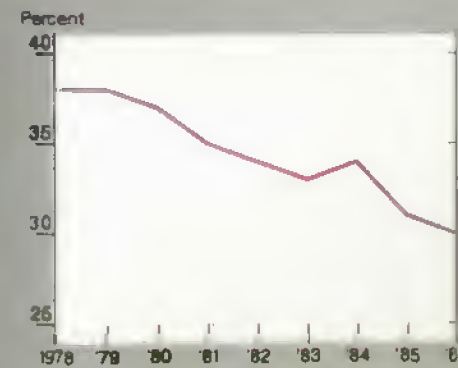
Farm net cash income



Farm real estate values



Farm value/retail food costs



<sup>1</sup>For commodities and services, interest, taxes, and wages. Beginning in 1986 data are only available quarterly. <sup>2</sup>For all farm products.

<sup>3</sup>Calendar quarters. Future quarters are forecasts for livestock, corn, and cash receipts. <sup>4</sup>Retail weight. <sup>5</sup>Seasonally adjusted annual rate.

<sup>6</sup>I = Dec.-Feb.; II = Mar.-May; III = June-Aug.; IV = Sept.-Nov.



## LIVESTOCK OVERVIEW

### Hogs

As of December 1, producers in the 10 quarterly reporting States indicated intentions to have about the same number of sows farrow in December-February as a year ago. If realized, this would be the first quarter without a year-over-year decline since June-August 1983. Producers plan to increase the number of sows farrowing 2 percent in March-May over a year ago.

This planned increase is the first indication of an expected breeding herd expansion. Based on the December 1 market hog inventory and farrowing intentions, commercial pork production is expected to drop 2 percent below a year ago in first-half 1987, and then rise about 5 percent in the second half.

The 10-State breeding hog inventory balance sheet indicates significant gilt retention. Between September 1 and December 1, producers in the 10 quarterly States added 210,000 head to the breeding inventory. September-November gilt retention was 18.4 percent of the September breeding inventory, the largest proportion since 1980.

This implies that the continued increase in pigs per litter will likely plateau or decline—perhaps in the March-May quarter, because gilts have smaller litters than mature sows. Through September-November pigs per litter had increased for 10 consecutive quarters.

Barrow and gilt weights at the 7 markets averaged 250 pounds live weight in December, up 2 pounds from November. Weights normally decline in this period—during 1973-1985, barrow and gilt weights dropped an average 3 pounds from November to December. The upward movement signaled a backlog of market-ready hogs. This occurred along with the seasonal holiday increase. After the holidays, the slaughter rate rose above a year ago. In addition, the average dressed weight rose further, especially barrows and gilts.

Preliminary data in early February show that average barrow and gilt weights at the 7 markets dropped, and slaughter rates declined below year-ago levels. However, weights in early February are 7 pounds above last year's monthly average and 10 pounds

above the 5-year February average. As the backlog of market-ready hogs became apparent and the demand for Christmas hams slackened, barrow and gilt prices at the 7 markets dropped sharply. From early December to early January, barrow and gilt prices dropped over \$6.00 per cwt.

Prices in December averaged \$51.42 per cwt, down \$2.00 from November. In January, prices averaged \$47.39 per cwt, down \$4 from December. Normally prices increase in December as weights lighten and slaughter rates decline from November levels. Also, in November and December pork imports were above a year earlier, reversing the trend of lower year-over-year imports. Weights lightened as cold weather moved into the North Central States, where 80 percent of hogs are produced. As a result, hog prices rallied in early February to about \$50 per cwt.

Retail pork prices are declining after reaching a record high in October, averaging \$1.91 per pound in December. The farm-to-retail price spread remains relatively large, at \$1.10 per pound, as farm value drops. The spread is expected to decline during first-half 1987, which could allow some supermarket pork specials even if farm prices rise.

### Cattle

The January 1, 1987 quarterly *Cattle on Feed* report indicates that beef supplies will be lower in 1987. The number of cattle on feed in the 13 quarterly reporting States was 5 percent below a year ago, the lowest inventory for this date since 1982. Fall placements were down 9 percent from a year ago. This reflects the lower feeder cattle supply and the early movement of cattle off pastures and into feedlots this past summer.

Fed cattle marketings rose 3 percent during the fourth quarter, and continued large in January. Thus feedlot marketings remain very current. Fed cattle marketings are likely to remain relatively large, but below year-earlier levels. Heavier cattle continue to be placed on feed, as calves are being retained on pasture for additional weight gain before being sold. Thus, time on feed has been reduced and a larger proportion of the cattle on feed are being marketed each quarter.

The cattle inventory as of January 1, 1987 was 102 million, down 3 percent from a year ago and the lowest since 1962. Feeder cattle supplies were

down 6 percent from a year ago. Larger feeder cattle imports, mostly from Mexico, are partially offsetting the overall decline. Imports increased sharply in November and December from year-earlier levels. Imports may remain large in early 1987, as the Mexican Government increased its feeder cattle export quota to 1,070,000 head in September 1986-August 1987, up from 964,600 a year earlier.

### Broilers

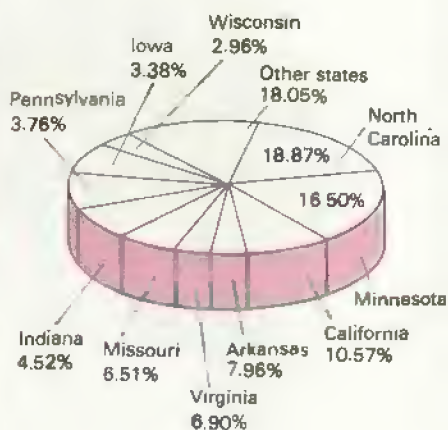
Recent increases in the hatchery supply flock have resulted in larger numbers of eggs being set and chicks hatched. Based on chicks hatched that could be slaughtered in first-quarter 1987, output from federally inspected plants is expected to be 6 percent above 1986. A similar increase is likely in the second quarter.

With smaller supplies of red meats, and higher prices, consumers will likely buy more chicken. In first-quarter 1987, prices for whole birds, including branded and without giblets, in the 12 cities may average 51 to 53 cents per pound, up from 1986's 50 cents. Prices in the second quarter are expected to average 52 to 56 cents per pound, near the 54 cents of last year.

### Turkey

The number of turkeys raised in 1986 was up 12 percent to 207 million head from 1985's 185 million. North Carolina accounted for 19 percent, the most of any State. Minnesota was second, followed by California.

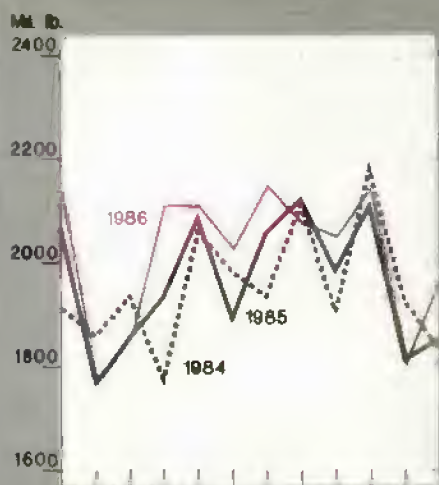
N. Carolina, Minnesota Lead in Number of Turkeys Raised



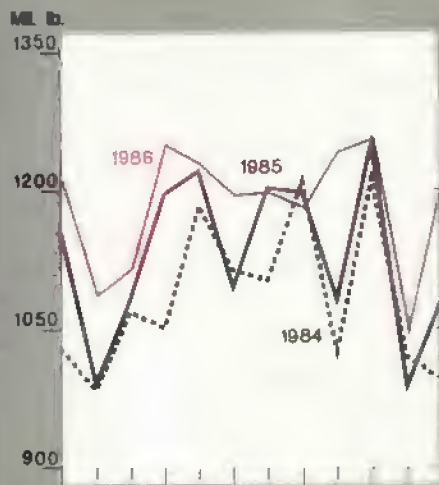


# Production of Livestock and Products

Commercial beef production



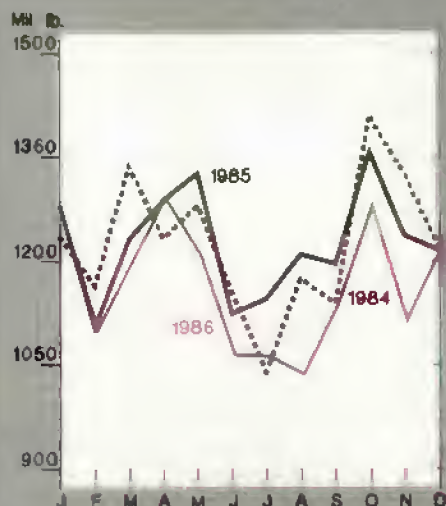
Broiler slaughter<sup>1</sup>



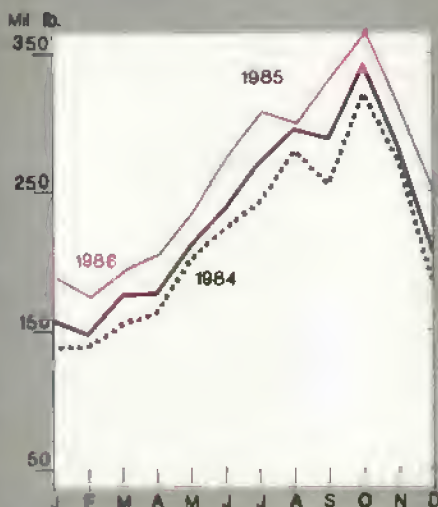
Egg production



Commercial pork production



Turkey slaughter<sup>1</sup>



Milk production



<sup>1</sup>Federally inspected slaughter, certified.

Based on turkey poulters placed that could be slaughtered in first-quarter 1987, output could be 16 percent larger than in 1986. Early indications are that producers are planning on an even larger increase in the second quarter, and production may be 19 percent larger than a year earlier.

Cold storage stocks at the beginning of 1987 totaled 178 million pounds, up from 150 million in 1986. This increase has likely helped weaken prices in January 1987.

With demand seasonally weak in the first quarter and increased supplies expected, prices for young hens may average 55 to 57 cents per pound,

down from 62 in 1986. Even with a sharp increase in supply in second-quarter 1987, prices are expected to average 58 to 62 cents, down from 68 in 1986.

## Dairy

Wholesale prices of dairy products have declined sharply since mid-December, reflecting the seasonal surplus following last autumn's tighter markets and the January 1 lowering of the support price. By early February, Grade AA butter prices had fallen 17 cents per pound, nonfat dry milk prices 2 cents, barrel cheese 6 cents, and block cheese 8 cents per pound from December. However, prices of Cheddar cheese and nonfat dry milk remained slightly above support purchase prices, even though substantial purchases were being made.

The seasonal wholesale-price decline was mitigated by very low commercial stocks. Commercial holdings of American cheese at yearend were the lowest since 1972, when commercial use was only two-thirds its current size. Commercial stocks of nonfat dry milk also were small. The quantities of these products in distribution channels probably had been depleted after the holiday season.

Farm milk prices have been slower to decline. The Minnesota-Wisconsin (M-W) price of manufacturing-grade milk was \$11.70 per cwt in January, down only 21 cents from the November peak. Without enough stocks to help



fill orders, plants did not allow competitors to bid away milk supplies. However, the price effects of low stocks probably will soon dissipate. The M-W price will likely be at or below the support level by early spring.

Milk production totaled 144.1 billion pounds in 1986, up less than 1 percent from 1985. Although the Dairy Termination Program resulted in a 3.5-percent decline from 1985 during the second half, large increases early in the year boosted the annual total. Commercial use of milk and dairy products was 134.2 billion pounds, up 3 percent from 1985. Since 1983, dairy sales have grown by a tenth. In calendar 1986, Government purchases under the price support program were 10.6 billion pounds, down from 13.2 billion a year earlier.

### Eggs

Egg production in 1987 is expected to be near to slightly above 1986. Producers replaced many of their old hens in 1986, and the flock is relatively younger. Producers could hold back some older hens and increase production slightly as the present hatch of egg-type pullets matures and enters the flocks.

With plentiful supplies of corn and soybeans, egg producers could expect relatively low feed costs. The implied decline in costs would normally generate an increase in egg production. However producers found in 1986 that increases in egg production resulted in much lower prices that more than offset the cost savings, and returns were negative.

With supplies expected to be near last year, prices in first-quarter 1987 may average 65 to 67 cents per dozen, down from 74 cents in 1986. Since Easter is late this year, the seasonal rise in egg demand will likely boost prices in the second quarter in 1987, rather than the first quarter as in 1986. During second-quarter 1987, prices may average 63 to 67 cents per dozen, up from last year's 63 cents.

*[For further information contact Ron Gustafson, Cattle; Leland Southard, Hogs; Allen Baker, Poultry and Eggs; Jim Miller, Dairy (202) 786-1830]*

## CROPS OVERVIEW

Foreign production of most crops, except cotton, is up again in 1986/87. However, U.S. output is lower, primarily because of greater participation in Government commodity programs with increased acreage reduction requirements. Total U.S. production of the major field crops this past season was down 9 percent from the record high of 1985/86.

Increased foreign production and lower commodity prices are boosting world consumption of all crops. However, domestic stocks of corn, soybeans, and wheat on December 1 were high by historical standards, and should remain so through the remainder of the 1986/87 marketing year.

Large food grain crops will be harvested worldwide in 1986/87, despite lower U.S. production. Global rice output is projected at a near-record 318 million tons (milled basis), while the world's wheat crop will be the largest on record—528 million tons. Although down from last year, rice stocks remain well above historical averages. The year will end with record wheat stocks.

Because of large gains in Canada and the USSR, foreign wheat production is projected to rise 9 percent in 1986/87 to a record 471 million tons. Foreign rice output of 314 million tons will be only 1 million below last year's record.

With foreign consumption gaining 5 percent in 1986/87, world wheat trade will increase 2 million tons from the 85-million-ton volume (excluding intra-EC trade) of last year. This trade level is about 15 million tons below the peak average of 1981/82-1984/85. The largest Soviet wheat crop since 1980 is cutting USSR wheat imports nearly 2 million tons from 1985/86, to the lowest level in the last 6 years. Latin America (particularly Brazil) and Africa have increased wheat imports this year.

A recent flurry of Export Enhancement Program (EEP) announcements, including a 1-million-ton initiative for China, could boost U.S. wheat sales in coming months. Exports for the year now are expected to total about 1.03 billion bushels, 12 percent above last year's disappointing 915 million.

EEP sales to Asian, East European, and North African markets are boosting exports, but the USSR has made

no purchases this year. This means that carryover stocks, at 1.87 billion bushels, will continue to plague the U.S. wheat industry as next season's crop develops. A major exception is Soft Red Winter wheat, with stocks at the lowest level since 1981/82. The January Grain Stocks report indicates that December 1 domestic wheat stocks totaled 2.66 billion bushels, slightly above a year earlier.

Domestic producers planted 48.7 million acres of winter wheat this past fall, 10 percent below the previous season and the lowest since 1978. Seedings were down due to heavy participation in the 1987/88 wheat program, an increase in the set-aside requirement from 25 to 27.5 percent, placement of acreage in the Conservation Reserve Program, and excessively wet field conditions in portions of the major wheat-growing areas. Seedings were lower in most growing regions, except the Delta, Delmarva area, Kentucky, and West Virginia.

World coarse grain production in 1986/87 is expected to total 836 million tons, 8 million below last season's record but 47 million above projected world use. Consequently, world ending stocks will continue to rise.

Foreign production is projected to be 583 million tons, up 14 million from 1985/86. Larger crops in the USSR, China, South Africa, and Canada are offsetting smaller production in Western Europe and Thailand. Foreign corn output has risen 13 million tons to a record 269 million. With a record Canadian barley crop and good Soviet production, foreign barley production is up despite lower EC output.

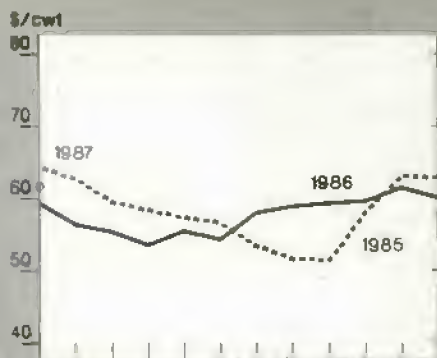
Foreign coarse grain utilization will expand by nearly 3 percent during 1986/87. Foreign stocks will increase slightly and foreign imports are expected to drop 2 million tons to 81.5 million (excluding intra-EC trade). This trade estimate is down about 10 million tons from the estimate in September, when much larger Soviet imports were anticipated.

With world trade in feed grains dropping, U.S. 1986/87 coarse grain exports are showing only a small recovery from last year's depressed levels. U.S. corn exports are projected to be 1.13 billion bushels, about 115 million down from last year. Lower imports

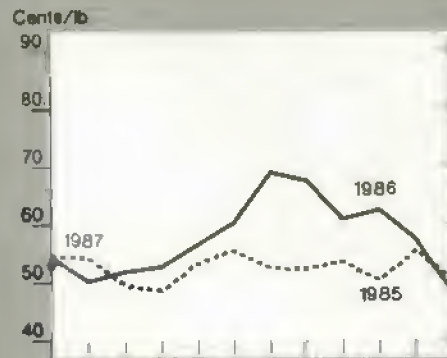


# Commodity Market Prices

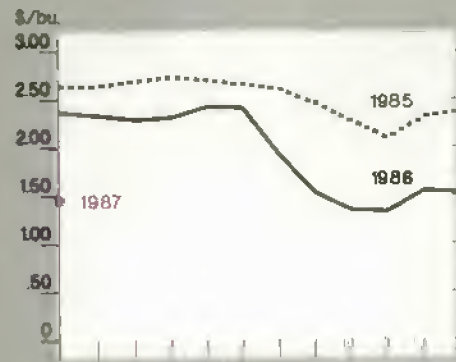
Choice steers, Omaha



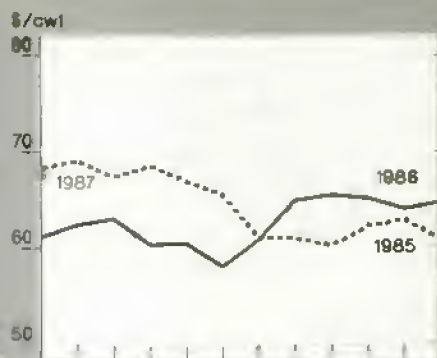
Broilers, 12-city average



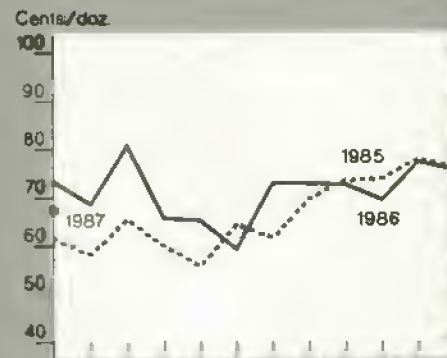
Corn, Chicago<sup>3</sup>



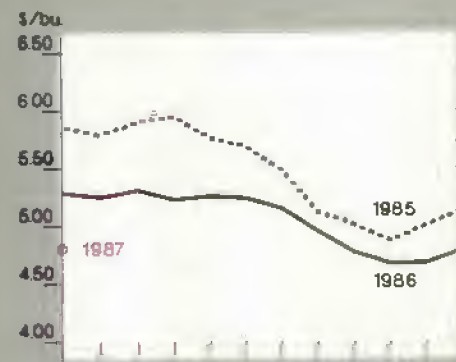
Feeder cattle, Kansas City<sup>1</sup>



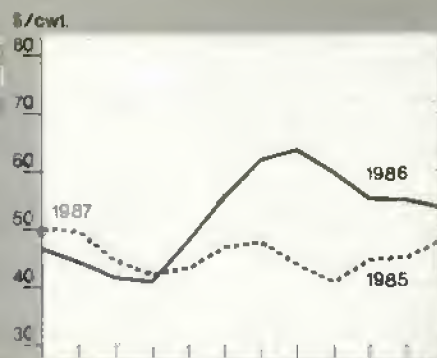
Eggs, New York<sup>2</sup>



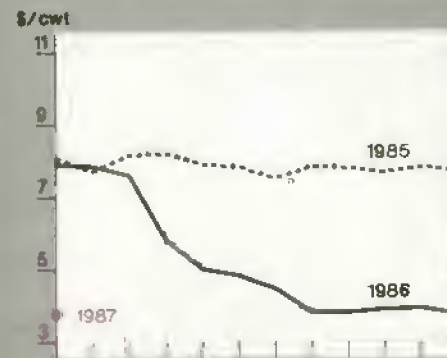
Soybeans, Chicago<sup>4</sup>



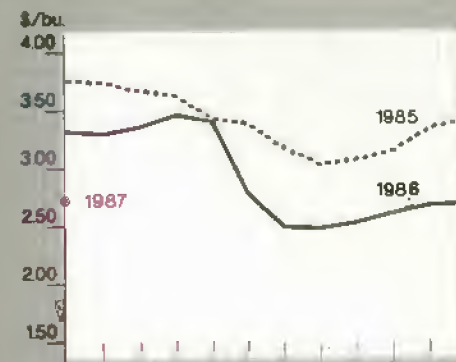
Barrows and gilts, 7 markets



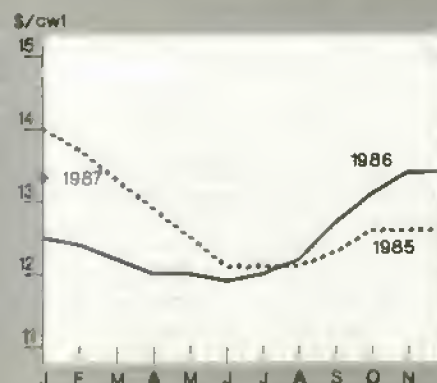
Rice (rough), SW Louisiana



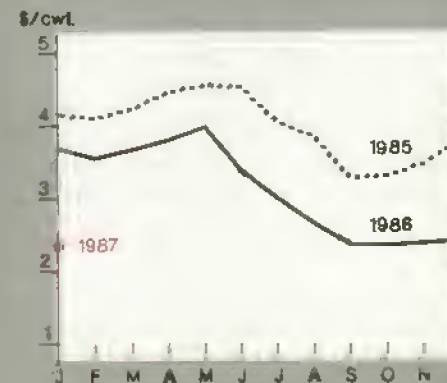
Wheat, Kansas City<sup>5</sup>



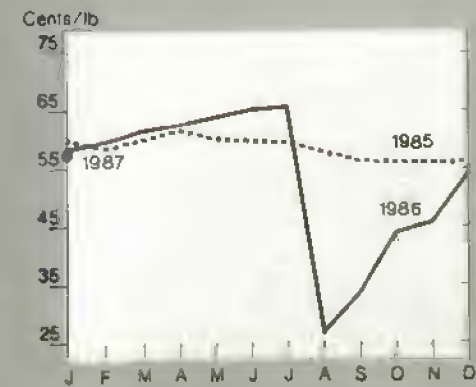
All milk



Sorghum, Kansas City



Cotton, average spot market



<sup>1</sup>600-700 lbs., medium no. 2. <sup>2</sup>Grade A Large

<sup>3</sup>No. 1 Yellow. <sup>4</sup>No. 2 Yellow. <sup>5</sup>No. 1 HRW.

by the USSR and the European Community are the main reasons for the decline.

In contrast, sorghum and barley exports are expected to increase. While U.S. sorghum sales are still running behind last year's pace, Argentina's crop prospects and likely export supplies have deteriorated, and Venezuelan purchases are expected to expand sharply because the Government has prohibited corn imports. So, the pace of U.S. sales should pick up, and 1986/87 exports are expected to total 225 million bushels compared with 178 million last year.

U.S. barley sales during the 1986/87 marketing year are running well ahead of last year's pace and are expected to reach a record 150 million bushels compared with only 22 million last year. Most of the increase is due to very large purchases by Saudi Arabia under the Export Enhancement Program. Saudi Arabia, which accounts for about one-third of world barley imports, has not increased its total imports this year, but is purchasing less from the EEC and Australia.

Domestic conditions, which point to another record carryout, compound the impact of the export projection. Record carryin, large crops, static demand, and low prices characterize the current situation. Though participation in the feed grain programs was heavy last season, near-ideal growing conditions in the Midwest and Plains led to record corn and sorghum yields of 119.3 and 67.7 bushels per acre, respectively, and a high barley yield of 50.8 bushels per acre.

As a consequence, this past season's feed grain crops were large, further adding to huge domestic supplies. Corn stocks as of December 1 totaled 10.3 billion bushels, compared with 8.6 billion a year earlier. On-farm stocks were 6.8 billion bushels, while off-farm stocks were 3.5 billion.

Despite the most favorable hog-corn price ratio on record, domestic use of feed grains is expected to rise only slightly, with declining dairy cattle, beef cattle, and hog inventories, as well as financial constraints, discouraging expansion.

Thus, total feed grain carryout on August 31, 1987, is forecast to be 171 million metric tons, up 35 percent from a year earlier, and 82 percent of

total annual use. The bulk of the carryout will be corn, which is expected to rise 42 percent to about 5.7 billion bushels, or 87 percent of annual use.

Record output of soybeans and rapeseed is expected to push 1986/87 world oilseed production slightly above the 1985/86 record of 195 million tons. More foreign production is just offsetting the drop in U.S. output. World crush will increase, but ending stocks are expected to rise 12 percent. World oilseed trade will rise, with soybean exports expected to gain about 3 percent.

U.S. sales of soybean meal thus far in 1986/87 are running well ahead of sales at this time last year, largely because of last year's drought-reduced crop in Brazil. Soybean shipments to the EC-12 and Taiwan have risen substantially. The pace of sales and exports is expected to slow sharply in coming months as Southern Hemisphere crops, which are expected to be larger than last year, are harvested. For 1986/87, U.S. soybean exports are projected to total 730 million bushels, 10 million below last year. Soybean meal export shipments will rise 6 percent to 6.35 million short tons, and oil exports will remain constant at 1.25 billion pounds.

Smaller palm oil shipments from Malaysia apparently have stopped the slide in world edible oil prices. Reduced Malaysian production means that global palm oil output will decline for the first time since 1982/83. However, world edible oil supplies remain large, with supplies of rapeseed oil and sunflowerseed oil at record highs. U.S. soybean oil shipments, which have dropped for 4 consecutive years, are projected to remain virtually unchanged in 1986/87 at 1.25 billion pounds.

Domestic soybean crush is projected to rise modestly to 1.11 billion bushels in 1986/87, helping to offset a drop in exports and lifting total disappearance by nearly 3 percent over last season's crop. But carryout is forecast 15 percent over a year ago at 615 million bushels. Also, because production is expected to exceed total use for both soybean meal and oil, 1986/87 ending stocks are forecast to rise 56 and 27 percent, respectively, from 1985/86.

The 1987 national poundage quota for peanuts is 1.355 million tons, the same as in 1986. The 1985 Farm Act requires that the national quota equal

expected domestic edible, seed, and related uses. Both the 1987 quota and additional percent loan rates were announced February 13. The rates are unchanged from 1986, at \$607.47 and \$149.75 per ton, respectively. The CCC minimum export sales price for edible additional also is unchanged at \$400 per ton.

Cotton supplies worldwide are beginning to decline in 1986/87 as production falls and consumption rises, but ending stocks will remain excessive. World production is forecast to fall 13 percent to 69 million bales, the lowest output since 1983/84's 68 million.

Consumption will reach a fifth consecutive record, rising more than 3 percent to 77 million bales. While cotton prices have risen from the very low levels of last fall, they remain low relative to historical cotton prices and slightly below polyester prices. Exports also will expand by 3 million bales, a 15-percent increase. Global stocks will fall from 48 to 40 million bales by the end of the season, but they still will be well above the 20-25 million bales common prior to 1984/85.

Foreign production will drop 6.4 million bales, while consumption grows a healthy 2.6 percent. Thus, foreign stocks at the end of 1986/87 will be 13 percent below 1985/86. Foreign exports likely will drop 2 million bales as the U.S. market share rebounds to a more normal level. The United States is expected to realize 44 percent of the worldwide reduction in stocks this year.

Strong domestic and foreign demand and a reduced 1986/87 U.S. cotton crop have contributed to recent price increases here and abroad. Domestic growers produced 9.8 million bales in 1986/87, down from 13.4 million a year ago because of a 17-percent reduction in harvested area and a 13-percent drop in average yield. Carryout this marketing year is forecast to fall 41 percent from 1985/86 to 5.5 million bales.

Since December 11, the weekly adjusted world price announced by USDA has been above the loan repayment rate. As a consequence, USDA will not issue first-handler cotton certificates until the adjusted world price drops back below the loan repayment rate (44 cents per pound for base quality). This is not expected to occur soon.



Since the new marketing year began in August, first handlers and holders of generic certificates have been able to redeem only cotton under loan. But starting January 2, certificate holders were able to exchange certificates for CCC-owned cotton, as well as cotton under loan, at the adjusted world price (redemption price). Nearly all the approximately 800,000 bales of cotton in CCC stocks have been exchanged with certificates.

The 1986/87 domestic tobacco outlook calls for reduced but abundant supplies, less production, and falling market prices with lower support prices and crop quality. Domestic tobacco production was estimated to be 1.2 billion pounds, 21 percent below a year ago and the lowest since 1936. Both harvested area and yields were down from 1985/86.

With a smaller crop and disappearance exceeding the crop, this year's carryout is projected to fall 10 percent from 1985/86 to about 3.4 billion pounds. Production is likely to increase next season. Although smaller basic quotas for flue-cured and burley have been announced for 1987, the effective quota will rise about 5-6 percent. Allotments for fire-cured, dark air-cured, and cigar filler and binder kinds must have been announced by March 1. [Michael Hanthorn (202) 786-1840 and Frederic Surls (202) 786-1691]

#### For further information contact:

Sara Schwartz, World food grains; Allen Scheinbein, Domestic wheat; Janet Livezey, Rice; Peter Riley, World feed grains; David Hull, Domestic feed grains; Tom Bickerton, World oilseeds; Roger Hoskin, Domestic oilseeds; Carolyn Whitton, World cotton; Bob Skinner, Domestic cotton; Jim Schaub, Peanuts. World information, (202) 786-1691; Domestic (202) 786-1840.

## HIGH VALUE CROPS

### Citrus Production Rises

Prospects point to a 12.2-million-short-ton citrus crop for the 1986/87 season, up 13 percent from last season. Fresh citrus prices are relatively firm. The FCOJ (frozen concentrated orange juice) price is up because of increases in the price of Brazilian FCOJ exports.

U.S. orange production is forecast at 197 million boxes, 12 percent larger than last year. Florida's crop is expected to reach 129 million boxes, while California's should total near 64.5 million. Production for Arizona and Texas combined should total 3.2 million boxes.

F.o.b. prices for Florida fresh oranges have averaged slightly above year-earlier levels, while California prices have averaged fractionally lower. January 1987 on-tree returns for all U.S. oranges averaged \$4.24 a box, down fractionally from a year ago.

The outlook for U.S. orange exports is brighter than last season. Lower California orange prices and the continuing weakness of the dollar should contribute to larger exports. Additionally, Japan boosted its import quota 10.6 percent for 1986/87 (April 1986-March 1987), to 115,000 metric tons. For 1987/88, the agreed quota volume will be raised to 126,000 metric tons. Orange shipments to Western Europe could improve if import demand reacts favorably to the lower duty rates negotiated under the U.S.-EC citrus accord.

Brazilian processors have raised prices twice on FCOJ exports to the United States following a preliminary Commerce Department ruling that Brazil was violating antidumping laws. The most recent rise was to \$1,200 a metric ton. Florida producers have followed Brazil's lead. The Florida f.o.b. price is \$4.34 per dozen 6-ounce cans (unadvertised brands), up 50 cents from the previous year.

The 1986/87 U.S. grapefruit crop is forecast at 57.6 million boxes, 9 percent above last year. Texas grapefruit production is rebounding, following the almost complete destruction of the Texas industry by freezes in 1983. The 1986/87 forecast is 2.1 million boxes, compared with 220,000 last

season. Fresh grapefruit prices in Florida have been strong and are likely to remain so throughout the season. Export prospects for fresh grapefruit are favorable.

Despite some damage from a mid-January freeze, California and Arizona lemon production is forecast up sharply from last season. Increased shipments have held f.o.b. prices to \$8.74 a carton this season (January 24 average), compared with \$16.28 a year ago. Prices are expected to remain below last year's through the winter.

### Winter Vegetable Acreage Up

Harvest area of the seven major winter fresh-market vegetables (broccoli, carrots, cauliflower, celery, sweet corn, lettuce, and tomatoes) rose 10 percent over last season to 193,400 acres. Domestic supplies should be larger than last winter's 56 million cwt. because of larger acreage and relatively good growing conditions. Imports from Mexico will likely be below last winter's 15 million cwt. Because of lower Mexican imports, prices likely will rise 5 to 7 percent at the grower level and 3 to 5 percent at retail.

Both California and Florida reduced celery acreage—California by 13 percent to 4,100 acres, and Florida by 3 percent to 3,200. These two States produce all domestic winter celery. The lower acreage follows the recent trend. A 19-percent-per-year growth in imports since 1980, a 3-percent-per-year decline in exports, and stable per capita utilization have lessened domestic celery acreage requirements.

Florida's winter tomato acreage rose 23 percent above last year to 19,500 acres. This represents the third consecutive year of growth. Florida tomato shipments in December ran 2 percent ahead of November and prices fell by half to \$18.80 per cwt.

Mexican early-season exports of fresh vegetables were 22 percent ahead of last year's. Shipments of tomatoes and cucumbers were particularly strong, averaging 32 percent ahead of last year's pace. Mexico's export shipments to the United States are expected to be below last season's levels in the high-volume portion of the season because of cold weather in January.

The 1987 potato crop outlook, compared to 1986, is for 4-percent-lower winter production, 8-percent-fewer processed stocks, and 13-percent-lower fall stocks. Potato production in 1986 fell 13 percent below 1985's record 407 million cwt. Prices should be strong well into 1987.

### **U.S. Sugar Production Forecast Raised**

U.S. raw sugar production for fiscal 1987 is now forecast at 6.5 million tons, the largest in more than a decade. The upward revision is based on NASS' annual production summary, released February 9. The new figure implies fiscal 1987 beet sugar production of 3.35 million tons, 150,000 tons above USDA's previous fiscal-year forecast. The cane sugar production forecast for the same period remains at 3.15 million tons.

U.S. average sugar prices for calendar year 1986 rose at the raw and wholesale refined levels, reflecting the Congressional mandate to run the sugar program at no cost to the Government. Retail prices, however, fell slightly for the second straight year, but have remained between 34.7 and 36.7 cents a pound over the last 4 years.

### **Sugar Loan Cut Proposed**

The Administration's fiscal 1988 budget proposal calls for a cut in the loan rate for raw cane sugar from 18.0 to 12.0 cents a pound. The proposal also calls for direct payments to sugarcane and sugarbeet growers over 4 years as compensation for the lower loan rates. Domestic sugar production will fall, sugar imports will increase, and the difference between world and U.S. sugar prices will diminish if Congress approves the change. *[For information contact: Ben Huang, Fruit; Shannon Reid Hamm, Vegetables; Dave Harvey, Sweeteners; Verner Grise, Tobacco (202) 786-1767]*



## **Commodity Spotlights**

### **Trends and Future Prospects for Cigarette Consumption in the United States**

Cigarette consumption in the United States may have fallen about 2 percent to an estimated 584 billion in 1986. Consumption has fallen 4 of the last 5 years, and is down 9 percent from 1981 after growing steadily from the early 1900's. Per capita consumption (by those aged 18 and over), meanwhile, has fallen to 3,275 cigarettes, the lowest since 1944. If current trends continue, consumption might decline 20 to 25 percent by the year 2000 to around 450 billion cigarettes.

Cigarette smoking is a 20th-century phenomenon. Only 2 1/2 billion cigarettes were smoked in the United States in 1900, but consumption grew rapidly after more efficient cigarette-making machines were developed in the early 1900's, and blended cigarettes were introduced in 1913. Per capita consumption tripled from 1920 to 1950, partly because of hiked advertising.

Between 1950 and 1981, total cigarette consumption increased nearly 80 percent, but per capita consumption rose only 16 percent. Per capita consumption declined in 1954 following the release of the first study linking cigarette smoking and lung cancer, but then climbed to 4,345 cigarettes by

1963. Then, in 1964, after the release of the Surgeon General's report on smoking and health, per capita consumption started to decline gradually. By 1981, per capita consumption was 13 percent below the 1963 record. Total consumption rose in most years because of population growth.

### **Price Increases Reduce Consumption**

The primary cause of reduced cigarette consumption since 1981 is the 52-percent jump in retail prices between August 1982 and December 1986, which resulted from increased manufacturers' costs and tax hikes. Although estimates vary, most studies show that a 1-percent increase in cigarette prices will result in a .1- to .7-percent drop in consumption. Therefore, the 52-percent price hike has probably caused much of the 9-percent reduction in consumption.

Since August 1982, cigarette wholesale prices have been increased 12 times, and the Federal excise tax was increased from 8 to 16 cents per pack of 20 on January 1, 1983, the first increase since 1951. Over two-thirds of the States raised excise taxes between 1983 and 1986, by an average of about 4 1/2 cents. State excise taxes now vary from 2 cents a pack in North Carolina to 31 cents in Washington.

### **Smoking Restrictions Increase**

Restrictions on smoking tend to shorten the total time available for cigarette smoking and likely reduce consumption. Fifteen years ago, cigarettes, cigars, and pipes could be smoked almost anywhere. Then, the 1972 Surgeon General's report on smoking and health reported the danger of passive smoking (involuntary smoking), which occurs from breathing in smoke-filled rooms.

As a result, 41 States, the District of Columbia, and a large number of towns and cities now have laws that either prohibit smoking in certain places or segregate smokers and non-smokers. The Army, Navy, and Marines have stringent smoking restrictions that apply to both military and civilian employees, and smoking restrictions in Federal Government-owned and leased buildings became more stringent in February 1987.



Consumption Trends  
Point Downward

With continuing U.S. budget deficits, the Federal cigarette excise tax likely will increase again within the next few years, and additional increases presumably will occur before the end of this century. Because of increased revenue needs, State excise taxes will also continue to rise.

Antismoking efforts will continue, and the number of places where smoking is restricted will continue to increase. Furthermore, smoking restrictions are likely to become more severe. The 1986 Surgeon General's report was again devoted to the effects of second-hand smoke, and this could result in greater activity to restrict smoking.

In addition, a decline in the number of younger adults suggests a further decline in cigarette consumption. Even though the adult population is growing, the 15-to-19 age group (potential new smokers) is declining.

Any estimate of cigarette consumption in the future is subject to considerable error. In addition to prices and smoking restrictions, many other factors affect cigarette consumption, including antismoking activities, real income, research findings about smoking and health, advertising and promotion by cigarette manufacturers, and health warning labeling. Surgeon General C. Everett Koop has called for a smoke-free society by the year 2000. This almost surely will not occur, but based on an extension of the 9-percent decline between 1981 and 1986, consumption by the year 2000 might decline an additional 20 to 25 percent. [Verner N. Grise (202) 786-1767]

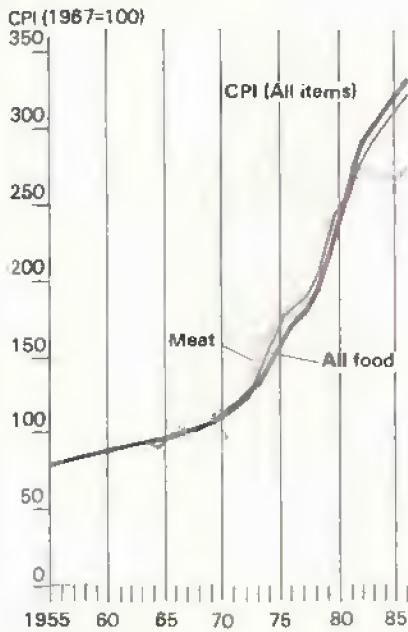


Some Longer-Term Trends  
that Influence the  
Meat and Food Sectors

Total meat supplies are nearly record large this year. Poultry consumption will be up. These observations reflect long-term trends in the meat sector.

Per capita red meat and poultry supplies have set a new record each year since 1982, and have steadily increased since the mid 1950's. For 1985-86, total meat consumed, retail weight equivalent, averaged near 215.0 pounds per capita, compared with less than 170 pounds for 1955-59. Use in 1987 is projected to drop 1 to 2 pounds.

Meat is Becoming Cheaper



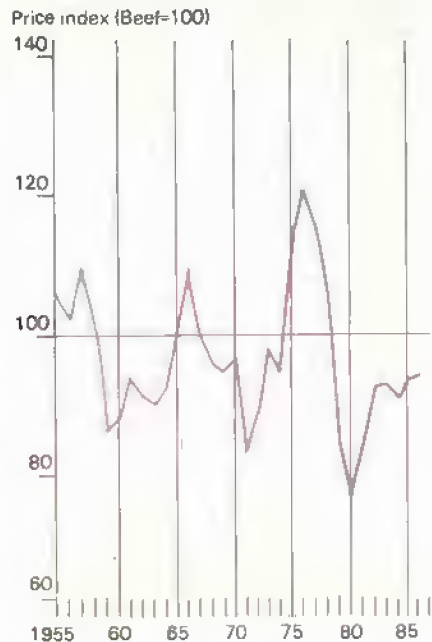
The type of meat eaten has shifted. Poultry consumption has grown since the 1950's. Red meat use increased until the early 1970's, but has since declined. These trends will likely accelerate as the poultry sector continues to expand rapidly and the beef sector contribution declines, with the beef herd beginning to stabilize from recent herd liquidation.

In addition to meat expenditures, total consumer expenditures need to be observed. Consumer expenditures are separated into three broad groupings—durable goods, nondurable goods, and services. The long-term trend is toward a smaller share of expenditures for nondurable goods and more for services.

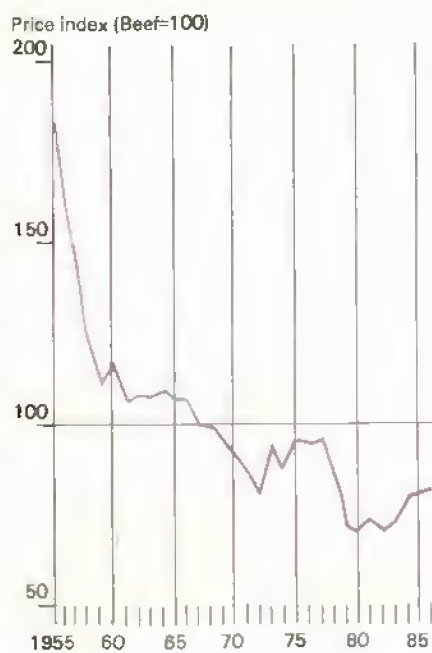
Food is slightly more than half of nondurable expenditures. This has been fairly constant over time. However, food expenditures now contain more services, both in meals consumed away from home and prepared foods consumed at home. This trend will likely continue, and could even accelerate in coming years.

Since the 1950's, the Consumer Price Indexes for all items, foods, and meat show some divergent trends. Prior to 1972, all three series increased at about the same rate. Meat and food prices advanced rapidly during 1973-79, particularly meat in 1973. Since 1980, as meat supplies expanded, meat and food indexes increased at

Price of Pork Relative to Beef Fluctuates  
With Pork Supplies



Poultry Prices Falling Relative to Beef



much lower rates than all items. During this period, the meats index moderated increases in the food index.

Given the expected large meat supplies over the next several years, the meats index will likely continue to dampen food index increases.

Relative long-term price levels between meats can be a useful source of comparisons. Since 1955, pork prices relative to beef have fluctuated, mostly in accordance with changes in pork supplies.

However, poultry prices have shown a very strong long-term trend. Prior to 1967, relative poultry prices were above to sharply above beef. Since 1969, relative poultry prices have consistently been below beef, clearly contributing to expansion of consumers' poultry use.

In the next few years, the total supply of meats will continue to be very large to burdensome, with expanding amounts of poultry meat and stable to declining amounts of red meats, especially beef. Consumers will likely continue to spend less for nondurable goods and foods, and more for services. Also, large total meat supplies will hold increases in meat prices below those for all items. [John Ginzel (202) 786-1830]

#### Butter and Margarine Sales

Margarine is an early example of a successful substitute product. Despite legal restrictions and taxes, margarine displaced butter throughout the fifties and sixties. Falling butter sales were a major reason that commercial use of dairy products remained stagnant during those decades. However, substitution of margarine for butter reached its limit during the early seventies. Since then, butter and margarine have held basically steady shares of a slowly shrinking market for table spreads.

In the mid-fifties, butter and margarine were sold in equal amounts. About 16.5 pounds of table spreads per person were sold commercially (excluding butter purchased under the dairy price support program and donated domestically). Throughout the sixties, per capita sales of table spreads fell slowly, as rises in margarine use did not offset declines in butter sales. By the early seventies, per capita sales of table spreads were down more than a pound from the mid-fifties, and butter's share was only slightly more than a fourth.

Since the early seventies, per person commercial use of table spreads has dropped another pound to about 14.

Butter's share has been steady at 25-28 percent, but it had a slightly larger share in 1983-85 than during most of the seventies.

The major reason that margarine came to dominate butter was its relatively low price. As reported by the Bureau of Labor Statistics (BLS), retail margarine prices averaged 40 percent of retail butter prices during the fifties, and only 36 percent during the sixties. Relative margarine prices since the early seventies have been similar, except during 1974-75, when margarine prices jumped to 61 percent of butter. In the eighties, margarine prices have been about 38 percent of butter.

The health issue does not appear to have had a significant effect on butter's share of the table spread market. The trend toward substitution of margarine for butter stopped shortly after the start of recommendations to reduce dietary intake of saturated fat and cholesterol. Furthermore, the downtrend in the total table spread market has not changed much during the past 3 decades.

Part of butter's firm hold on the last fourth of the market may be explained by the relative importance of away-from-home eating places and food manufacturers as butter buyers. Probably less than half of butter sales go through grocery stores. The cost difference between butter and margarine is a tiny proportion of the final cost of a restaurant meal or premium prepared foods, but butter imparts a quality image. Within the home, butter may now be associated with special occasions or uses where less consideration is given to cost.

The downtrend in total table spread sales will probably continue. These products are obvious sources of fat and calories in the diet. However, the long-run adjustment to relative prices apparently ended more than a decade ago. Butter's share of the table spread market probably will be at least steady. If the pattern of the most recent years persists, butter's share would increase, as butter sales remain constant while margarine sales decline. [Jim Miller (202) 786-1830]



## World Agriculture and Trade

### U.S. AND THE EC AGREE ON COMPENSATION IN ENLARGEMENT TRADE WAR<sup>1</sup>

In compensation for lower U.S. feed grain exports because of Spain's and Portugal's entry into the Common Market, the European Community (EC) has agreed that Spain will import 2 million metric tons of corn and 300,000 tons of sorghum annually from outside the EC. If imports do not reach this level through tariff reductions, the grain will be imported directly by EC intervention agencies. Under the 4-year agreement, the United States will share this quota with other exporters.

Tariffs on 26 other agricultural products and industrial goods were also reduced, and the EC lifted a requirement that 15 percent of Portugal's grain imports come from the rest of the EC.

The agreement brought the United States and the EC back from the brink of another trade confrontation because of the lost feed grain exports.

The United States had threatened to retaliate with 200-percent tariffs that would practically halt a variety of food and beverage imports from the European Community. In return, the EC planned to impose large tariffs on U.S.

<sup>1</sup>For further information on the trade war, see AO, July and August 1986.



# U.S. Agricultural Trade Indicators

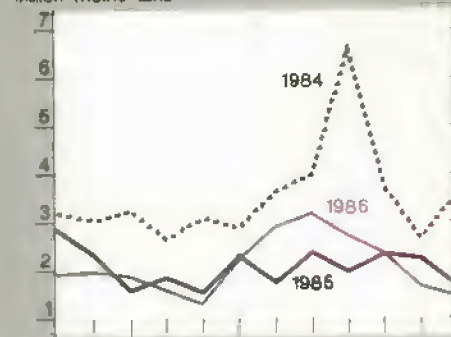
U.S. agricultural trade balance

\$ billion



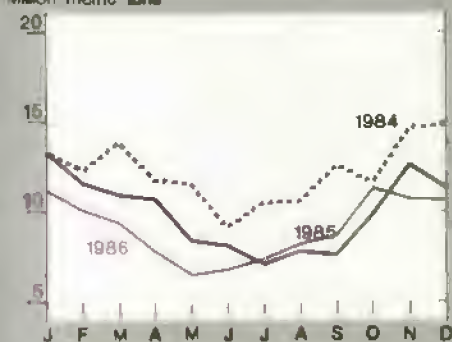
U.S. wheat exports

Million metric tons



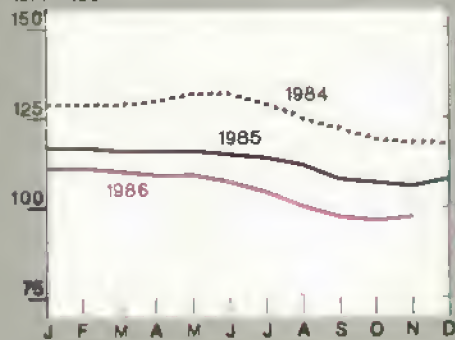
Export volume

Million metric tons



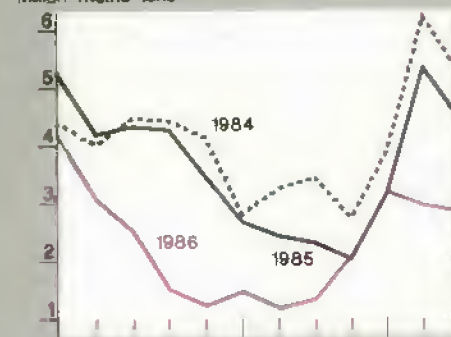
Index of export prices

1977 = 100



U.S. corn exports

Million metric tons



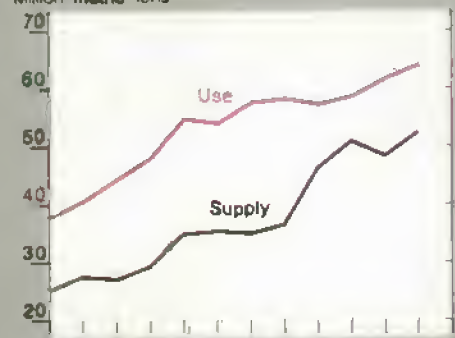
Foreign supply & use of coarse grains

Million metric tons



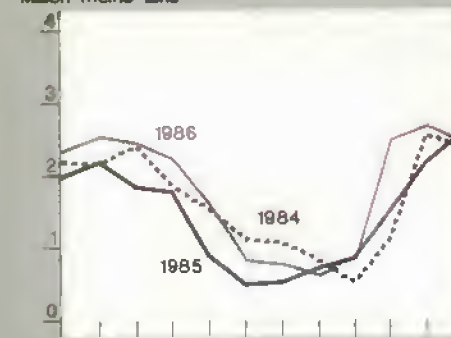
Foreign supply & use of soybeans

Million metric tons



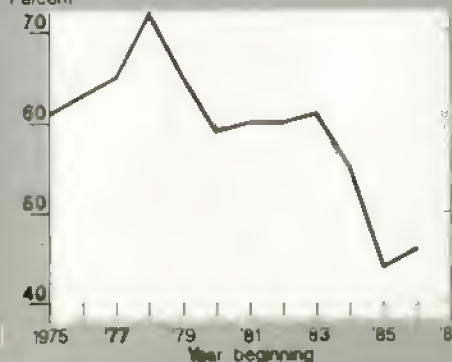
U.S. soybean exports

Million metric tons



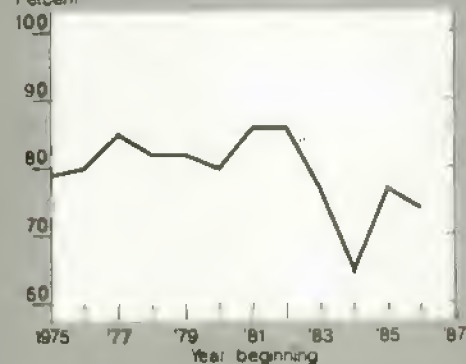
U.S. share of world coarse grains exports<sup>1/2</sup>

Percent



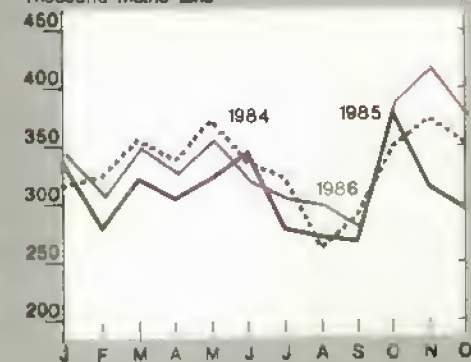
U.S. share of world soybean exports

Percent



U.S. fruit & vegetable exports<sup>3/</sup>

Thousand metric tons



1/ Excluding intra-EC trade. 2/ October-September years. 3/ Includes fruit juices.

Notes: Wheat, corn, soybean, and cotton exchange rates and export unit values are now included in the U.S. Agricultural Trade Tables at the back of this issue.

exports of corn gluten feed and rice. With the sanctions to take effect on January 31, observers waited breathlessly until negotiators reached agreement on January 29.

### **Enlargement Leads To Market Losses**

The United States and the EC are both faced with agricultural support programs made costly because demand is expanding more slowly than supply. The EC's addition of Spain and Portugal affected agricultural markets that accounted for 10 percent of U.S. fiscal 1983 feed grain exports and 11.6 percent of U.S. soybean exports. Thus, the United States tried to persuade the European Community to provide compensation under the terms of Article 24:6 of the General Agreement on Tariffs and Trade (GATT).

By joining the EC, both Spain and Portugal began a transition to variable levies on grain imports. The EC variable levy is an import tax that increases as the difference between world prices and internal EC prices increases. Since 1985, the dollar's decline, lower U.S. loan rates, and the Export Enhancement Program have led to lower world feed grain prices. However, the EC levy on corn has risen from 29 percent of the c.i.f. price in 1983/84 to its current level of nearly 200 percent, preventing imported feed grains from competing with higher priced European feed grains.

U.S. coarse grain exports to Spain fell to 1.7 million metric tons in fiscal 1986, down from a 1981-83 average of 3.7 million. Prior to the January 29th agreement, U.S. feed grain exports were expected to decline further in 1987, even though the 1986 Spanish grain harvest fell 30 percent as a result of drought. Grain imports from France and the U.K., as well as sales of grain stored by the Spanish intervention agency, are filling part of the shortfall. Nongrain-feed-ingredient imports also increased as a result of the variable levy on grains combined with zero EC tariffs on oilseeds and most nongrain feeds.

### **Exports After the Agreement**

As a result of EC concessions, U.S. feed grain exports to Spain are expected to be 1.6 to 2.0 million metric tons annually. The United States has been facing stiff competition from Argentina over the last several years.

The U.S. share of corn sales to Spain fell from 94 percent in 1981 to 68 percent in 1985. The timing of purchases currently under discussion could actually lead to a higher U.S. share because of seasonal differences in crops in the Northern and Southern Hemispheres.

The agreement with the EC provides for increases in Spanish imports of corn gluten feed, distillers' dried grains, and citrus pulp to count against the feed grains quota. This will lead to a gradual replacement of feed grains by nongrain feeds because duties are bound at zero on oilseeds and most nongrain feeds, and grains are subject to variable levy. Exports of U.S. corn byproducts to Spain rose from zero to 80,000 metric tons in fiscal 1986.

While both U.S. and EC producer groups have voiced dissatisfaction, several positive factors have emerged from the agreement:

- This represents a major step, in that the EC has agreed to significant compensation under Article 24:6 of the GATT, following enlargement. When Greece joined the EC in 1981, no such compensation was provided.
- Limitation of the reduced levy quota to Spain provides the best possible guarantee that imports under the quota will be in addition to normal commercial imports in the rest of the EC; and
- Provision for imports either under a reduced levy quota or by direct purchase on world markets provides added assurance that the agreement will be honored.

### **Implications for Trade Negotiations**

Talks for the new Uruguay round of the GATT Multilateral Trade Negotiations (MTNs) began on February 9. The United States hopes to use the MTNs to limit the EC's use of export subsidies. The EC is interested in discussing arrangements that would permit it to "harmonize" protection of its agriculture, trading lower tariffs on grains for tariffs on oilseeds and nongrain feeds. Tariffs on oilseeds and most other nongrain feed ingredients were bound at zero during an early round of MTNs. Retaliation in the recent trade war skirmish would have started this process in motion.

Now that the conflict over enlargement appears to be settled, negotiators can get to work on conflict stemming from the EC's planned ban on animal products produced with hormones, and in clarifying agreements on pasta and citrus. [Mark D. Newman (202) 786-1719]

[For additional information see "Government Intervention in Agriculture: Measurement, Evaluation, and Implications For Trade Negotiations," Nicole Ballenger (202) 786-1666]

### **Upcoming Economic Reports**

Summary Released	Title
<b>March</b>	
3	Fruit
9	World Ag. Supply & Demand
12	Sugar & Sweetener
17	Agricultural Outlook
20	World Agriculture
<b>April</b>	
1	Tobacco
2	Oil Crops
3	Rice
8	Agricultural Resources
9	World Ag. Supply & Demand
14	Middle East & North Africa
15	Cotton & Wool
16	World Food Needs & Availabilities Update
17	Agricultural Outlook
20	Dairy
	Foreign Ag. Trade of the U.S.
21	East Asia & Oceania
24	Feed





## Farm Finance

### Financial Prospects for the Farm Sector

Net farm income for 1986 likely ranged between \$28 and \$32 billion, in line with the final 1985 figure of \$30.5 billion. A small increase to \$29 to \$34 billion is expected in 1987, because lower production expenses and larger direct Government payments will outweigh further declines in cash receipts. In 1987, production expenses are expected to drop over \$1 billion to \$124 billion, and Government payments could rise \$3 billion to \$16 billion.

In 1986, cash receipts fell \$8 to \$10 billion, but Government subsidies and declining production expenses added around \$12 billion to farmers' incomes. The same combination may increase net cash income to \$45 to \$49 billion in 1987.

### Prices and Cash Receipts Continue to Fall

Prices received by farmers for all commodities fell about 4 percent in 1986, but feed grain prices dropped 20 percent and food grain prices 18 percent. Cash grain enterprises—farms with more than half their sales from grains—account for more than one quarter of all farms. Because of falling prices and lower output, total 1986 crop receipts probably dropped 14 percent, to around \$63 billion, and further slippage is expected during 1987.

Livestock receipts likely rose about 2 percent in 1986 to \$71 billion, and could rise another \$1 billion in 1987.

### Government Role Increases: 1987 Payments to Exceed 1986 Record

As in 1986, 1987 Federal farm-sector outlays will largely compensate for falling cash receipts. Nonrecoverable direct Government payments in 1986 totaled about \$12 billion. The issuance of marketing certificates as compensation for a third of 1986 direct payments has accelerated CCC loan redemptions. This cut net lending \$3.5 billion in calendar 1986 and likely prevented the redeemed commodities from being forfeited and added to the bloated Government stockpile.

Deficiency payments will likely decline in 1987, but will be supplemented by paid land diversion payments for feed grains. The value of marketing certificates issued in 1987 could reach twice the 1986 level if 1987 payments are composed of a percentage of certificates to cash similar to 1986 payments. These certificates should again reduce outstanding CCC loans through decreased forfeitures.

Grain producers received about 76 percent of total program payments in 1986, and may receive more than 80 percent in 1987.

### Production Expenses, Input Use to Continue Falling in 1987

Farm input use has trended down since 1979, and reductions in planted acres should add 1987 to the trend. Meanwhile, the 1987 index of prices paid for production items is forecast to average about 8 percent less than 3 years ago. Feed, seed, fuel, and energy- and petroleum-based input prices have dropped most. With the exception of fuel, the declines may continue into 1987. While recent world oil price increases will likely push fuel and energy prices up (although they may average below a year earlier), fertilizer and chemical costs should not be directly affected in the coming crop year.

Interest, on both short-term borrowing and real estate debt, has fallen since the 1982 record. Projected 1987 interest payments may total about \$16 billion, 28 percent below the peak.

### Open-Market Sales\* Account for 85 Percent of Crop Cash Receipts

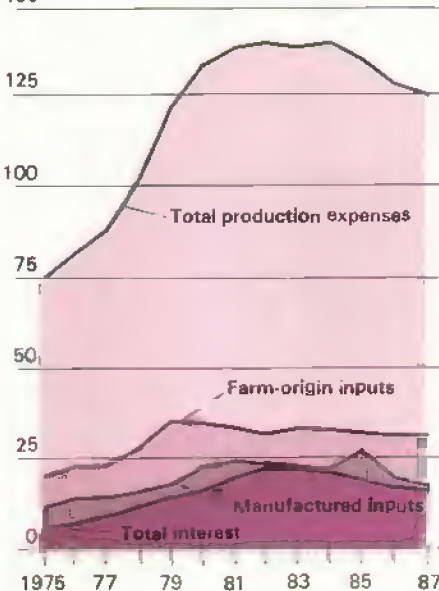
Percent of open market sales



\*Open-market sales equal total receipts minus net CCC receipts.  
1987 forecast

### All Farm Production Expenses Dropping

Billion dollars



### Net Cash Income by Enterprise Type

Net cash income in 1986 likely increased \$3 to \$4 billion for livestock operations, compared with a \$2- to \$3-billion decline on crop farms. Furthermore, most of the livestock income gain was shared by poultry, hog, and dairy enterprises. Income on poultry

operations likely averaged \$30,000 higher in 1986, compared to an average gain of only \$750 for all livestock enterprises. In 1987, the incomes of red meat producers are projected to grow the most.

For cash grain farms, net cash income probably dropped 16 percent in 1986. A similar decline may occur in 1987. On the other hand, income gains are projected for vegetable, nursery, and greenhouse enterprises, all highly specialized farms producing high-valued products.

#### ***Farm Debt Fell in 1986, Rate of Decline in Assets Slowed***

Total farm debt (excluding farm households) outstanding on December 31, 1986, fell roughly \$6 billion from a year earlier, a 3-percent drop, despite growth in outstanding CCC loans of \$2 to \$3 billion. Excluding CCC loans, farm debt was about 6 percent below a year earlier. All major farm liability components, both real estate and non-real estate, fell in 1986.

However, the value of farm assets fell approximately \$69 billion from \$771 billion in 1985. Real estate and non-real estate asset values fell roughly in equal proportions. Falling crop prices have caused much of the slippage in non-real estate assets; the value of crops stored fell roughly \$7 billion or 20 percent. Current dollar farm equity fell to an estimated \$515 billion in 1986, or about 60 percent of the record \$833 billion in 1980. [Richard H. Kofl (202) 786-1808]



## **General Economy**

The U.S. economy slipped quietly into 1987, after posting a 2.5-percent growth rate in 1986, the lowest rate since the 1982 recession. However, fourth-quarter developments, such as the record stock-market rise, gave some indication that the economy is shaking off its nearly 2-year sluggishness, and there is a good chance that growth in 1987 could be brisk by year's end.

Perhaps the most important fourth-quarter development was the improvement in the real net export deficit—an inflation-adjusted measure of the net flow of goods and services between the United States and foreign economies. The more widely reported merchandise trade figures, which are released monthly, are not adjusted for inflation.

In the fourth quarter of 1986, nominal net exports worsened from the third quarter (-109 to -116), while the inflation-adjusted figures improved (-163 to -156).

Because production and employment are probably more closely related to the flow of real goods and services than to their nominal values, the real net export deficit is probably the better guide to economic health. The expected continued improvement in the net export picture is a major factor in the improved outlook for the general economy.

Real Gross National Product (GNP) in 1987 is likely to grow, on average, somewhat faster than 3 percent, and growth will probably accelerate throughout the year. Business plant and equipment spending, which declined 1.4 percent on an inflation-adjusted basis in 1986, is likely to be a plus in 1987. Consumption, the driving force in the expansion of the last 2 years, will probably slow slightly in 1987, as consumers attempt to rebuild savings and reduce historically high debt levels.

Inflation is likely to be higher in 1987 than in 1986, mainly because the steep drop in crude oil prices is unlikely to be repeated. Recent OPEC arrangements may even cause a temporary worsening of inflation. Although the domestic crude oil price reached an 8-year low of \$9.39 per barrel in July 1986, by the first quarter of 1987 prices had risen to about \$19 per barrel.

Overall consumer prices reflected the oil price decline, with prices rising more slowly in 1986 than in any year since 1961. When energy and food price changes are excluded from the overall Consumer Price Index, inflation in 1986 was still a moderate 4.0 percent. Consumer price inflation in 1987 is likely to be about 3 to 4 percent.

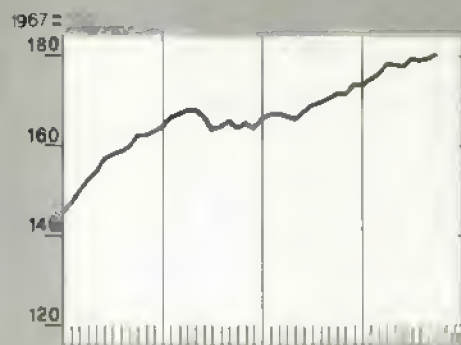
With faster real growth and slightly higher inflation, interest rates are likely to rise slowly but steadily through the year. Business credit demand for plant and equipment spending could put upward pressure on corporate borrowing rates. On the credit supply side, with real activity near 3 percent, the net export deficit improving, and inflation in the 3-to-4 percent range, it is unlikely that the Federal Reserve will move to ease credit conditions substantially. In 1986, the Federal Reserve pursued a relatively easy credit policy by allowing the M2 money supply to grow at the upper end of its growth target band (9 percent) and by cutting the discount rate four times.

Disposable income is likely to grow faster in 1987 than in 1986 for two reasons. First, with a pickup in economic activity, more workers should be hired in relatively higher-wage manufacturing jobs. This should cause wage and salary income to rise faster than GNP. Second, even if before-tax income does not rise substantially,

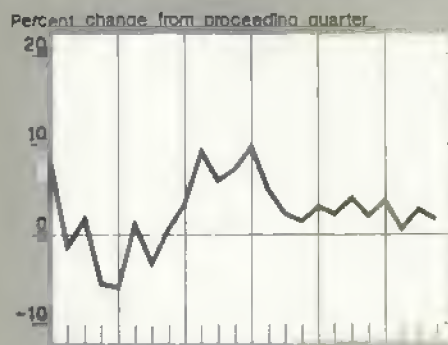


# General Economic Indicators

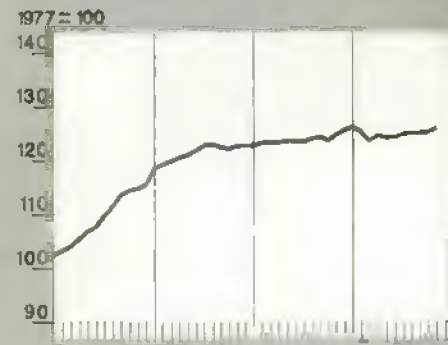
Composite leading economic indicators



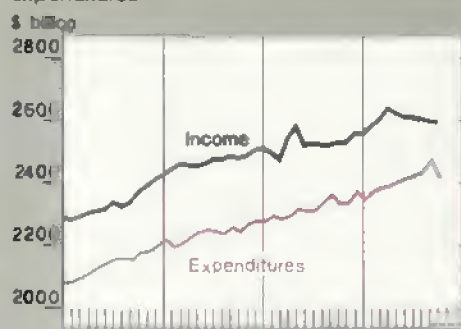
Gross national product<sup>1</sup>



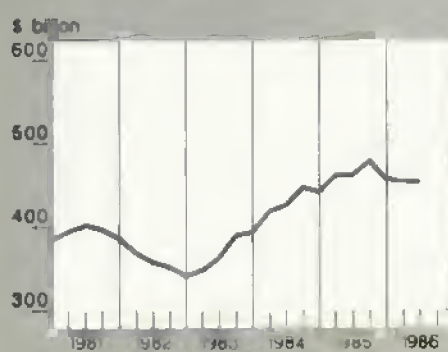
Industrial production



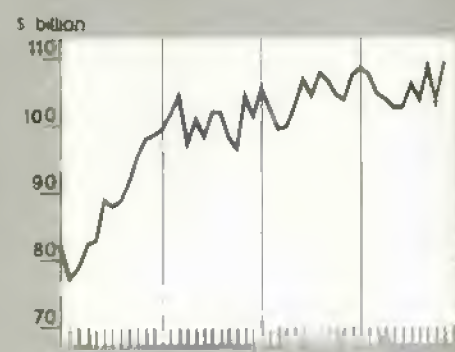
Disposable income and consumption expenditures<sup>2</sup>



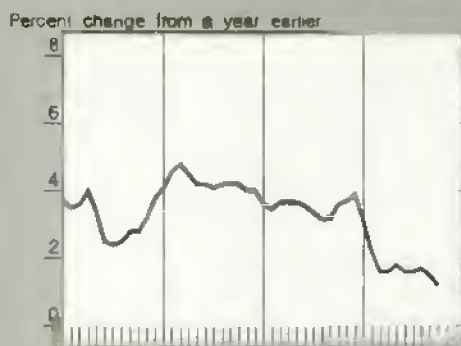
Nonresidential fixed investment<sup>2</sup>



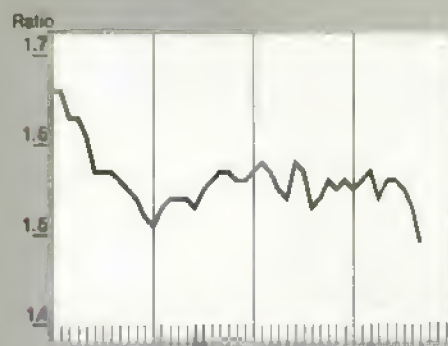
Manufacturers' durable goods orders<sup>3</sup>



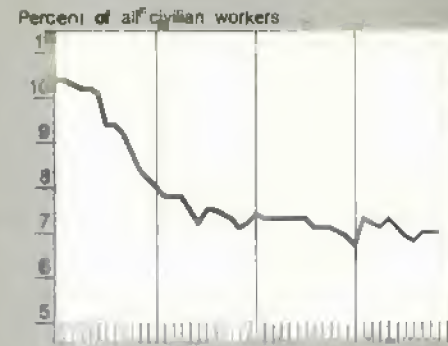
Consumer price index



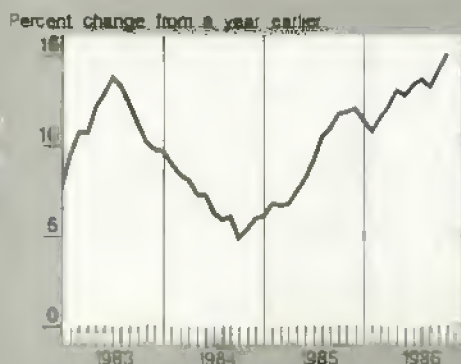
Inventory/sales<sup>4</sup>



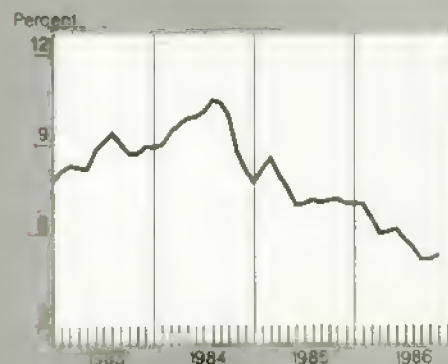
Unemployment rate<sup>5</sup>



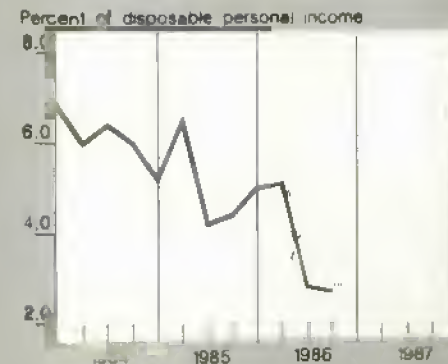
Money supply (M1)



3-month Treasury bill rate



Savings rate<sup>6</sup>



<sup>1</sup>Percent change from previous quarter in 1982 dollars. <sup>2</sup>Seasonally adjusted annual rates. <sup>3</sup>Billions of 1982 dollars, seasonally adjusted at annual rates.

<sup>4</sup>Nominal dollars. <sup>5</sup>Manufacturing and trade, seasonally adjusted, based on 1982 dollar. <sup>6</sup>Seasonally adjusted.

<sup>7</sup>Calculated from disposition of personal income in 1982 dollars, seasonally adjusted at annual rates.

Sources: U.S. Dept. of Commerce, U.S. Dept. of Labor, and the Board of Governors of the Federal Reserve System

after-tax or disposable income is likely to rise because of lower rates in the new tax system.

While the above scenario is likely for 1987, there are other factors which could change the outlook:

- The net export deficit improvement could prove to be temporary. If there is no continued improvement, real GNP and income growth will be much lower, perhaps by 1.5 to 2 percentage points.
- Plant and equipment spending may not improve quickly even if the net export deficit does. Businesses may wait before buying new plant and equipment to see whether the increase in demand holds. To the extent that spending is delayed, real activity will be slower.
- Crude oil prices could swing in either direction. If prices rise substantially, inflation and interest rates could jump. If prices fall, there could be regional bank failures, which would put some upward pressure on interest rates.

#### *The Federal Budget: 1988*

President Reagan's fiscal 1988 budget proposes \$1,024 billion in outlays, and estimates receipts at \$917 billion. If these projections prove correct, the deficit would be \$108 billion—the Gramm-Rudman-Hollings (GRH) deficit target for the year. If Congress approved the proposed budget without change, there would be no need for Congress and the President to agree to across-the-board spending reductions that are the centerpiece of the GRH legislation. In fact, any budget approved by the President and Congress that implies a deficit less than \$118 billion is acceptable, since GRH considers any deficit within \$10 billion of the target to have hit the target.

The current services budget deficit is \$150 billion, \$42 billion higher than the GRH target. Under GRH, the excess deficit would then have to be split evenly between eligible defense and nondefense spending programs.

The President's proposal increases revenue by slightly more than \$22 billion from current service revenues. About \$6 billion comes from increased tax receipts. Of the remaining \$16 billion, about \$5 billion comes from privatization—selling ongoing Government enterprises such as Amtrak and

#### *Budget Outlays and Receipts, 1986-1988*

	1	2	3	4	(3-4)
	Actual	Expected	President's	Current	Diff.
	1986	1987	Proposal	Services	1/
			1988	1988	1988
<b>Outlays by function</b>					
<b>Billion dollars</b>					
Defense	273	282	298	298	-
International affairs	14	15	15	17	-2
Science, Energy, Natural Resources	27	28	29	33	-3
Agriculture	31	31	26	27	-1
Health, Education, Income Security	257	267	265	282	-17
Social Security	199	208	219	219	-
Veterans benefits	26	27	27	27	-
Other	59	60	52	58	-6
Net interest	136	137	139	139	-
Offsetting receipts	-33	-37	-45	-41	-4
<b>Total</b>	<b>990</b>	<b>1016</b>	<b>1024</b>	<b>1060</b>	<b>-36</b>
<b>Receipts (Tax)</b>					
Personal income tax	349	364	393	392	1
Corporate income tax	63	105	117	116	1
Social Insurance Tax & contributions	284	302	333	331	2
Excise tax	33	33	33	32	1
Other	40	40	40	39	1
<b>Total</b>	<b>769</b>	<b>842</b>	<b>917</b>	<b>910</b>	<b>6</b>
<b>Deficit (Outlays less receipts)</b>	<b>221</b>	<b>175</b>	<b>108</b>	<b>150</b>	<b>-42</b>

1/ Estimate of outlays and receipts if no changes are made from the currently enacted budget.

#### *Economic Assumptions in the Budget*

	1985	Calendar year	1987	1988
		1986		
<b>Percent</b>				
GNP growth 1/	2.7	2.5 2/	3.2	3.7
Inflation 1/ 3/	3.8	1.1	3.6	3.5
Unemployment rates	7.2	6.9	6.5	6.2
Interest rate 5/	7.5	6.0	5.4	5.6

1/ Fourth quarter over fourth quarter. 2/ Preliminary. 3/ Consumer Price Index. 4/ Civilian unemployment rate. 5/ Average on 91-day Treasury bills.

the Naval Petroleum Reserves—about \$4 billion from selling Government loan assets, and about \$3 billion from increasing user fees for Government services.

About \$19 billion of the \$42-billion reduction from the current service deficit results from changing Government spending programs. About \$7 billion is expected to come from major medical programs, primarily by proposing a system of set prices for each kind of procedure rather than the current system of cost reimbursement. Another

\$10 billion would result from such changes as tightening requirements for loan assistance from the Rural Electrification Administration, cutting back on subsidies for energy technology, restructuring Federal financial assistance to students, and eliminating Federal support for vocational education.

#### *The Budget Deficit and the Economy: The Issues*

The deficit not only affects the economy, it is affected by the economy. Because some Government spending



programs, such as unemployment insurance, are tied to economic performance, spending rises somewhat when the economy deteriorates. Further, Government tax receipts depend on business and consumer income, which generally rises faster when the economy is expanding. Worse-than-expected economic performance has pushed the deficit estimate for fiscal 1987 from \$154 billion in October to about \$175 billion in February. If real GNP growth declines by 1 percentage point, the deficit is likely to rise by \$10 to \$20 billion.

Some argue that the deficit itself is not measured correctly, and that adopting more conventional accounting techniques causes much of the deficit problem to disappear. As an example, conventional accounting practices spread the cost of acquiring long-lived assets over their useful lives, while Federal Government accounting practices place the entire acquisition cost in the year of acquisition. To the extent that the Government buys long-lived assets, its current-year expenses are higher than would conventionally be measured, and the deficit appears worse than it may actually be. The President has proposed regularly issuing a capital budget to allow analysts to examine this problem.

Some analysts believe that the primary effect of high deficits is higher interest rates. Higher interest rates reduce business plant and equipment and consumer durable spending, leading to slower real activity. In the long run, the economy's potential to produce is lower because of the lower rate of capital formation.

A variant of this argument is that higher interest rates caused by higher deficits put upward pressure on the value of the dollar. This makes it difficult for U.S. producers to compete worldwide, causing slower domestic growth and higher unemployment.

The above arguments are consistent with economic theory, but economists have been unable to confirm statistically the key relationship between higher interest rates and higher Government deficits. Recent declines in nominal interest rates and the value of the dollar, even in the face of historically high Federal deficits, highlight the importance of other factors.

Other analysts argue that the financing of increased Government expenditures (either by raising taxes or selling bonds) is largely irrelevant. What matters is how much of the country's resources are commanded by the Government. Many of these analysts contend that since private individuals and businesses are the best judges of their own welfare, taking resources away from them to be spent in other ways results in a less productive economy. A major problem with this position is balancing the productivity loss against the public's wishes for increased spending to alleviate problems whose solutions do not have measurable productivity gains.

However, most economists would agree that whatever the ultimate effects of deficit reduction, an attempt to reduce the deficit substantially by reducing Government purchases of goods and services, or increasing taxes, is likely to reduce the pace of real activity in the short term.

The contraction could occur, if only because the losers from such changes will be forced to react immediately to their losses, while the gainers may take some time to change their behavior to take maximum advantage of their new circumstances. Whether policymakers and elected officials are willing to endure the likely short-term losses to reap more uncertain long-term gains will be a factor in the coming budget debates. [Ralph Monaco (202) 786-1283]

## Upcoming Releases from the Agricultural Statistics Board

The following list gives the release dates of the major Agricultural Statistics Board reports that will be issued by the time the April *Agricultural Outlook* comes off press.

### March

- 3 Egg Products
- Poultry Slaughter
- 5 Dairy Products
- 6 Celery
- Vegetables
- 9 Crop Production
- 12 Turkey Hatchery
- 13 Potato Stocks
- Milk Production
- Livestock Slaughter Annual
- 16 Cattle on Feed
- 18 Cold Storage Annual
- 20 Hop Stocks
- Catfish
- Cold Storage
- Livestock Slaughter
- 23 Vegetables
- 24 Eggs, Chickens, & Turkeys
- Hatchery Production-Annual
- 27 Peanut Stocks & Processing
- Wool & Mohair
- 31 Prospective Plantings
- Grain Stocks
- Rice Stocks
- Agricultural Prices
- Hogs & Pigs

### April

- 1 Egg Products
- 2 Poultry Slaughter
- Dairy Products
- 3 Meat Animals - Prod.
- Disp., & Income
- 6 Celery
- 9 Crop Production
- 10 Vegetables
- 13 Turkey Hatchery
- 14 Potato Stocks
- 16 Floriculture Crops;
- Milk Production
- 20 Catfish
- 22 Poultry-Production & Value
- 23 Eggs, Chickens, & Turkeys
- 24 Cold Storage
- Cattle on Feed
- Livestock Slaughter
- 28 Peanut Stocks &
- Processing
- 30 Agricultural Prices

## South-Central Energy-Dependent Banks in Delicate Condition

Low oil and natural gas prices are taking a severe toll on commercial banks in Colorado, Kansas, Louisiana, Oklahoma, and Texas. These five States contain the majority of U.S. banks with energy credits exceeding 25 percent of capital (equity plus loan-loss reserves). Often above average in size, the region's energy banks are important to agriculture, even though they tend not to meet the agricultural bank definition.<sup>1</sup> Many have farm loan volumes that exceed the total assets of a typical agricultural bank. Moreover, nonagricultural banks held almost one-third of the \$9 billion in commercial bank-held farm loans in these States as of mid-1986.

Within the region, conditions differ for the farm and nonfarm banks, as problems induced by declines in the energy, real estate, and related markets are beginning to overwhelm farm-sector problems. Sharp declines in performance, especially at nonagricultural banks, occurred during the first 6 months of 1986. Many of these nonagricultural banks do not specialize in energy finance but are suffering from ripple effects, set off by the contractions in the farm and energy sectors.

The average rate of return on assets (ROA) for nonfarm banks, on an annual basis, fell by half to 0.05 percent by midyear 1986. Nonperforming loans jumped by 0.64 percentage points to 3.62 percent of loans. Loan charge-offs for 1986 represent 1.53 percent of total loans using first-half data on an annual basis, but may have exceeded 2 percent by year-end 1986. Capital ratios at these banks fell, perhaps reflecting attempts to maintain dividends. The number of vulnerable nonfarm banks—those with nonperforming loans greater than capital—increased by 29 to a total of 105 between December 1985 and June 1986.

In contrast to the nonfarm banks, performance changes at agricultural banks in the region were mixed. Their average ROA is estimated to be up slightly for 1986, but nonperforming

<sup>1</sup>Ratio of farm loans (both production and real estate) to total loans exceeding the unweighted average of such ratios at all banks on the date specified (16.21 percent on June 30, 1986). There were 14,184 commercial banks in mid-1986, including 4,836 agricultural banks.

## Conditions in the Stressed Energy Banking Region, 1/ 1985-86

	Region		Type of bank		Nation		Nation	
	Agricultural bank	Nonagricultural bank	All U.S. banks	All agricultural banks	12/85	6/86	12/85	6/86
Rate of return on assets <sup>2/</sup>	0.44	0.47*	0.12	0.04*	0.55	0.64*	0.52	0.62*
Capital ratio <sup>3/</sup>	10.31	10.42	9.86	9.76	9.82	9.83	10.17	10.33
Net loan charge-offs as percent of loans	2.18	1.99*	1.47	1.53*	1.33	1.47*	2.12	1.72*
Provision for loan losses as percent of loans	2.55	2.41*	1.73	1.80*	1.55	1.40*	2.42	2.06*
Nonperforming loans as percent of loans	3.81	4.61	2.98	3.62	2.94	3.35	3.95	4.67
Vulnerable banks <sup>4/</sup>	38	52	76	105	273	364	141	197
Banks declared insolvent & closed	19	29	20	42	118	137	69	63

1/ Texas, Oklahoma, Louisiana, Colorado, and Kansas; data in the first four columns of this table are unweighted averages of all banks in these States. 2/ Net income after taxes as a percentage of total assets. 3/ Total capital as a percent of total assets. 4/ Banks with nonperforming loans, loans past due 90 days, and loans in nonaccrual status, greater than total capital.

\* Indicates that an annual rate was estimated with first-half data.

Source: Report of Income and Report of Condition files, Board of Governors of the Federal Reserve System.

loans rose from 3.81 percent of loans to 4.61 percent over the first half. Agricultural bank loan losses in the five States continued to run higher than at agricultural banks elsewhere during the first half of 1986, but capital ratios continued to rise. Overall, agricultural banks in the five States compare favorably to farm banks nationally, and are in a better position than the region's nonfarm banks.

In 1986, the five-State region accounted for 52 percent of all bank closures in the United States. Despite the overall performance of farm banks in the region, about 46 percent of 1986 farm bank closures were in these five States.

Crude oil prices rose in early 1987 to around \$18 a barrel, but analysts believe U.S. oil production will continue

to decline unless prices rise above \$20 a barrel. Moreover, lags of 18 to 24 months are common in banks' recognition of loss, so regional banking conditions are expected to continue deteriorating despite slightly higher oil prices.

Even though agricultural banking conditions in this five-State region are not as bad as might be expected, the region's banking problems are severe enough to retard the availability of farm credit. Over 40 percent of commercial-bank-supplied agricultural credit comes from banks that do not specialize in farm finance, so the adverse developments affecting the region's nonagricultural banks have negative implications for farm credit. Moreover, the region's problems will probably reduce credit available for any use, including farming. (Gregory Gajewski (202) 786-1884)





## Inputs

### FACTORS AFFECTING PRODUCTIVITY

Productivity growth in agriculture has had a large impact on the U.S. economy. On average, productivity grew 2 percent per year from 1948 to 1984, and output more than doubled. There is, however, a distinction between "increases in productivity" and "increases in production." Production refers only to output, whereas productivity refers to output per unit of input.

The productivity measure used here refers to a measure of "total factor productivity," that is, measures which include output in relation to all inputs, not just to one. Other less descriptive measures of productivity include output per labor hour and yields per acre. These measures do not account for the influences that other important inputs have on production.

For instance, yields per acre in the 1960's, compared with yields in the 1940's, indicate considerable gains. But increased use of other inputs, particularly fertilizer and other agricultural chemicals, explains much of the apparent growth. The increase in output didn't happen magically from the land, as a yield-per-acre index would suggest. Rather, it increased as a result of increased fertilizer usage; plant breeding; protection from insects, weeds and diseases; cultural practices; and a variety of other factors.

The change in total input use occurs as a result of substituting cheaper in-

puts for more expensive ones, using better-quality inputs, and adopting new technologies. All these increase the overall efficiency of production.

Productivity growth is the link between the growth in output or total production and the increase in input use. First, inputs such as land, labor, machinery, chemicals, and seeds are measured. They are combined in an index of total input growth, which is then compared to total output growth. The difference is productivity growth.

Productivity growth indicates the efficiency with which resources are combined in production. Productivity improvements result in resource savings and cost reductions. Improvements in productivity are necessary to mitigate the effects of inflation by offsetting input price increases, especially if input prices increased more rapidly than output prices. The cost-reducing and resource-conserving advantages of productivity gains are among the most important means of establishing and maintaining international competitiveness.

#### *Historical Trends in Agricultural Inputs and Outputs*

The productivity index is the ratio of outputs produced to inputs used. There have been significant differences in the growth rates of the output and input indexes since 1948.

Inputs can be grouped into five main classifications: capital, labor, land, materials, and energy. Capital, labor, and land are the primary inputs in production. Labor includes hired, self-employed and family labor. Materials include seeds, agricultural chemicals, and other purchased inputs. Energy includes gasoline, diesel, LP and natural gas, and electricity.

The use of capital has grown considerably since World War II, while labor has fallen markedly. As the number of farms has decreased since 1948, so has the number of farmers and the use of farm labor. Increased use of mechanical inputs has replaced manual labor and improved efficiency. The amount of land used has declined a little over 1 percent a year since 1948. While total acres have declined, farm size has increased.

With increased use of capital inputs, energy demand increased, though recently energy-conserving practices have reduced use. The increased reliance on energy makes agriculture vul-

nerable to supply interruptions. Energy crises in 1973 and 1979 adversely affected short-term productivity.

Material inputs, such as hybrid seeds, fertilizers, and pesticides, have greatly increased land productivity. This is a clear example of the importance of productivity growth. If the amount of land was ever a constraint on food production capacity, the productivity gains from various material inputs, combined with increased use of capital, have overcome it.

Output growth has varied. Total output of crops grew at 2.2 percent per year from 1948-84, compared with 2.0 percent for livestock and dairy. Of the crops, oilseeds grew the most, at 4.0 percent, while grains and other field crops (including fruits and vegetables), grew 3.0 and 1.0 percent per year, respectively. Among animal products, livestock products grew 2.5 percent while dairy grew 0.6 percent per year.

An index of total factor productivity (TFP) can be derived as the ratio of total output to total input. In general, the input index has been fairly stable, while the output index has more than doubled since 1948. The growth in quantity of inputs used accounts for only 2 percent of the growth in output; increases in TFP account for the remainder. TFP reflects a change in the quality of inputs used.

The growth of TFP has been uneven from period to period. During the post-war boom from 1948 to 1957, TFP growth accounted for much of the output growth. General prosperity in the economy brought increased consumer demands, resulting in increases in investment and adoption of newly available technologies. These facilitated productivity growth.

The 1957-to-1969 period included the first major agricultural acreage reduction programs. Without concurrent output controls, farmers increased their yields. In 1972 and 1973, agricultural exports increased, resulting in rising commodity prices and net returns which resulted in farmers' using more marginal land, thus reducing productivity. In periods when business is good, farmers are not pressured to be as cost efficient as in lean times, resulting in lower productivity growth.

From 1973 to 1979 further increases in exports and substantial increases in machinery investment occurred, which increased overall productivity. Another factor during the 1970's was a

Output, Input, and TFP Indexes, 1977 = 1.00

Year	Output	Input	TFP
1948	0.581	0.934	0.622
1949	0.553	0.951	0.582
1950	0.561	0.942	0.596
1951	0.588	0.958	0.614
1952	0.600	0.953	0.630
1953	0.614	0.922	0.666
1954	0.623	0.923	0.674
1955	0.649	0.950	0.683
1956	0.666	0.949	0.702
1957	0.659	0.941	0.701
1958	0.668	0.949	0.704
1959	0.694	0.977	0.710
1960	0.717	0.965	0.743
1961	0.717	0.969	0.739
1962	0.722	0.969	0.745
1963	0.761	0.970	0.785
1964	0.757	0.954	0.794
1965	0.806	0.974	0.827
1966	0.773	0.971	0.796
1967	0.824	0.977	0.844
1968	0.820	0.982	0.836
1969	0.852	1.000	0.853
1970	0.848	0.982	0.863
1971	0.902	0.984	0.917
1972	0.912	1.013	0.900
1973	0.914	1.037	0.881
1974	0.907	1.001	0.906
1975	0.969	0.972	0.997
1976	0.969	0.989	0.981
1977	1.000	1.000	1.000
1978	1.002	1.035	0.968
1979	1.042	1.056	0.988
1980	1.002	1.040	0.963
1981	1.127	1.016	1.109
1982	1.118	0.993	1.126
1983	0.946	0.979	0.966
1984	1.251	0.950	1.317

## Average annual percentage rates of growth

1948-53	1.10	-0.26	1.36
1953-57	1.77	0.49	1.28
1957-60	2.82	0.85	1.97
1960-69	1.92	0.40	1.52
1969-73	1.74	0.91	0.83
1973-79	2.19	0.30	1.90
1979-84	3.65	-2.12	5.75
1948-84	2.13	0.04	2.08

major shift to soybean production, which requires fewer purchased inputs per acre.

Productivity growth since 1980 has been very high, largely because farmers have been more intensively cultivating less land. Since 1980, land values have fallen precipitously, resulting in capital losses. These capital losses have increased the costs of owning land. Therefore, the implicit rental price, or cost of holding land, has risen. Combining higher implicit rents with a decline in the use of land results in a significant decline in the index of an important input. During the 1980's, declining returns to farming have also resulted in less investment in capital equipment and a lower

use of energy and other inputs due to fewer acres planted.

Use of all inputs except labor declined in the early 1980's, which resulted in greater productivity. This kind of relationship between productivity and net income or profitability is seen in all parts of the economy. When profits decline as firms enter a business downturn, input use tightens as businesses attempt to become more cost efficient.

*Future Trends for Productivity*

Productivity gains are the primary source of economic growth. Productiv-

ity gains are among our most important means of establishing and maintaining international competitiveness.

Productivity change can cause major changes in an economy by freeing up the use of certain resources, which may then be shifted to other sectors of the economy. This is what happened to labor when machines were introduced earlier in this century. Freeing labor from agriculture provided labor for industrial development.

While terms like "freeing labor" may sound positive, for the people involved it is often a process of displacement. But productivity growth still contributes to generally rising "planes of living" or Gross National Product per capita. Productivity growth or technological progress brings new products and better quality inputs, which advance the quality of life for most people.

In the long term, growth in output depends on development and adoption of new technologies and techniques for managing agricultural resources. If the 1948-1984 rate of productivity growth continues, output in the United States will increase another 40 percent by the year 2000, assuming input use does not decline.

*Primary Inputs*

Falling land values and reduced land use could have a positive impact on agricultural productivity. Recent changes in the tax laws may result in decreases in capital investments. Decreases in capital stock greatly affect the productive capacity of the sector and will reduce productivity growth. We may still see fewer farms and farmers resulting in less operator labor, and as new harvesting technologies become available, there may be less demand for hired labor. More and better pesticides also reduce the demand for labor and will contribute directly to increases in productivity.

*Output Mixes*

Commodity prices affect input use. As prices increase for certain commodities, farmers will shift to producing higher value products. Changes in the output mix can result in changes in the input mix, with both results affecting productivity.

*Improved Inputs and Technological Change*

New technologies have increased productivity. Adoption of new harvesting



### Output Quantity Indexes, 1977 = 1.000

Year	Livestock	Dairy	Oilseeds	Grains	Other field crops
1948	0.554	0.865	0.260	0.472	0.743
1950	0.584	0.888	0.262	0.361	0.704
1960	0.753	0.969	0.418	0.566	0.822
1970	0.946	0.949	0.801	0.672	0.850
1980	0.988	1.050	1.019	1.015	0.982
1984	1.361	1.098	1.131	1.431	1.070
Average annual percentage growth rate					
1948-84	2.50	0.66	4.08	3.08	1.01

### Indexes of Input Quantities Used, 1977 = 1.000

Year	Capital	Labor	Energy	Materials	Land
1948	0.376	2.443	0.540	0.514	1.263
1950	0.516	2.264	0.614	0.529	1.184
1960	0.699	1.608	0.702	0.710	1.145
1970	0.846	1.097	0.776	0.939	1.063
1980	1.084	0.996	0.940	1.091	0.993
1984	0.978	1.073	0.835	0.969	0.839
Average annual percentage growth rate					
1948-84	2.66	-2.28	1.21	1.76	-1.13

### Measuring Productivity

Measures of productivity are some of the most important agricultural indicators. Productivity is estimated as a residual. First, the effects of measurable contributors to output, for example land, labor, machinery, chemicals and seeds, are accounted for, and an index of the growth in total input use is constructed. This index is compared to the growth in total output. The difference is productivity growth.

The difficulty with computing productivity indices lies in combining different inputs into a single index. To combine heterogeneous inputs, each input is multiplied by its price, and these products are summed. To compare periods, the cost of total inputs in one period is compared with another period using a base year price.

The problem is, which periods' prices do we use? If past prices are used (a Laspeyres index), input growth is measured through the events of the past. If current prices are used (a Paasche index), it implies the opposite. Either approach is technically correct, and there is no basis for choosing among alternatives, but the implication of having two different approaches is important. Consider the following hypothetical prices and quantities of labor and capital:

	Output index	Labor hours (L)	Capital services (K)	Wage rate (w)	Capital rental (r)
1980	115	300	100	\$1.90	\$120
1950	60	1000	70	0.25	50
The resulting difference in the input index yields two different growth rates in TFP:					
		Laspeyres index		Paasche index	
1950		100		100	
1980		142		157	
Growth rate 1950-80		35%		45%	

For this article a Divisia index is used. This method finds the mean growth rate. The Divisia index aggregates inputs by their average cost shares between adjacent periods. The method has the advantage of finding a growth rate that lies between the Laspeyres and Paasche rates.

As a final note, what a peculiar thing productivity is. Ultimately all output comes from some combination of inputs, and therefore productivity gains must be embodied in the inputs. But it is the way they are combined, and the environment in which they are combined, that make the difference. For example, in industry, poor worker attitudes will inhibit the productivity of even the most modern machines. In agriculture, even the best fertilizer is useless without rain.

equipment, planting implements, irrigation improvements, minimum- or no-till practices, changes in genetic structure, and new pest control practices and materials, have all boosted productivity.

Improvements in productivity often result from basic and applied research. Land Grant colleges, USDA's Agricultural Research Service, and private companies invest in research to find ways of improving productivity and to profit from it. In the eighties, various forms of biotechnology are already in use, and more forms will gradually come on line.

### Regulations and Government Policies

Environmental regulations and Government agricultural policies can have a negative impact on productivity. Any policy that directly or indirectly constrains a producer's ability to allocate inputs and resulting outputs reduces efficiency. Pesticide regulations, land use restrictions, air quality standards, zoning, and a variety of other constraints may all inhibit optimal input use. However, if benefits to society are included in the accounting, the net effect could be positive.

The long-run structure of agriculture clearly depends on agricultural policies. If policy were to become more free-market oriented, producers will want to become as efficient as possible by adopting new technologies. With policies such as acreage control programs without production controls, farmers will also be strongly encouraged to adopt yield-increasing technologies.

But these programs can also inhibit optimal input allocation. Poor-quality land is often set aside, while better-quality land is used. With more use of fertilizer, there may be an increase in yields per acre, but there may not be an increase in total factor productivity, because input use is not at the optimal level.

Over the next decade, financial conditions in the farm sector will encourage farmers to continue to be cost efficient. Therefore, the TFP growth rate may be above the long-run rate of 2 percent per year, perhaps in a range of 2 to 4 percent. As financial conditions improve, and without major technological breakthroughs, TFP will begin to fall toward the long-run rate. [Robbin Shoemaker (202) 786-1459]





## Agriculture and the 100th Congress

The 100th Congress has a Democratic majority in both the House and Senate. The preceding two Congresses were characterized by a Republican majority (53-47) in the Senate and a larger Democratic majority (253-182) in the House of Representatives.

For agriculture, the 99th Congress was dominated by debate over the Food Security Act of 1985. That measure, which will govern agricultural programs through 1990, was passed amid fiercely fought partisan battles. Debate began in February 1985 when the Administration released provisions of The Agricultural Adjustment Act of 1985, and was not completed until President Reagan signed the Food Security Act on December 23, 1985. This compromise legislation may be reconsidered in the 100th Congress.

Spring is early in a Congressional session, but the positions of the Administration and Congress are forming. The President traditionally sets the Administration's agenda for the coming year in the State of the Union message. This year's address centered on such issues as fairer trade and the Federal budget deficit. Specific farm program goals were not mentioned. In the Democratic response, Senate Majority Leader Robert Byrd and House Speaker Jim Wright laid out three issues that would receive priority attention in the coming year: trade, education, and agriculture.

In the Congress, the Senate Committee on Agriculture, Nutrition, and Forestry and the House Committee on Agriculture have agricultural policy responsibilities. For the 100th Congress, there have been significant changes in their membership and leadership.

### Senate Chairmanship Changes

In the Senate Agriculture Committee, the number of Democrats to Republicans changed from 8/9 to 10/8. Republican Chairman Jesse Helms was replaced by Democrat Patrick Leahy of Vermont, and Senator Richard Lugar of Indiana became the ranking minority member. Subcommittee chairmen and ranking minority positions offer members an opportunity to help set the agricultural program agenda.

The Senate Agriculture subcommittees themselves have been changed from those of the 99th Congress. Only the Subcommittee on Research, Conservation, Forestry, and General Legislation remains the same. As the new Chairman of the Senate Agriculture Committee, Senator Leahy has not yet laid out a policy agenda. He has, however, promised to focus the Senate's attention on the problems of farm families. This includes holding more Agricultural Committee hearings in farm regions, and encouraging individual Senators to stay with farm families to gain a better understanding of the problems farmers face.

Three major agricultural positions will confront the 100th Congress. One position, most closely identified with Senators Tom Harkin of Iowa and Ed Zorinsky of Nebraska, endorses mandatory production controls. If approved by a majority of producers voting in a referendum, these controls would limit the acreage an individual could place into production and the amount of commodity that could then be marketed.

As a new subcommittee chairman, Senator Harkin will have a greater opportunity to lay out his proposal. In addition to Senators Harkin and Zorinsky, Kent Conrad of North Dakota and Tom Daschle of South Dakota, two new members of the Agriculture Committee, spoke in support of production controls in campaign speeches.

Senator Rudy Boschwitz of Minnesota holds the opposite view. Senator Boschwitz's program would eliminate or "decouple" the production requirement from income support payments. There would be no set-aside requirement. In return for giving up target prices, producers would receive set Federal payments. In the 99th Congress, Senator David Boren of Oklahoma was a co-sponsor of a similar measure.

As of now, these two positions provide the end points between which the 1987 agricultural debate will likely occur. A third position is the two-pronged program laid out by the Administration in its 1988 budget proposal. One aspect of the program is an annual 10-percent reduction in target prices beginning in 1988. The second aspect is expansion of the 50/92 provision of the Food Security Act.

Currently, producers can plant as little as 50 percent of their permitted acreage to a program crop and receive 92 percent of that commodity's deficiency payment. The Administration proposes a "0/92" requirement that would free producers from having to plant commodities that are already in serious oversupply in order to receive deficiency payments. Individual members of the Senate Agriculture Committee have not yet come forward to announce their support for the Administration's position.

The Administration has proposed limiting all commodity payments, except paid land diversion, to \$50,000. Under



## U.S. House of Representatives Committee on Agriculture

### Democrats (26)

E. (Kika) de la Garza (TX), *Chairman*  
 Walter Jones (NC)  
 Ed Jones (TN)  
 George Brown (CA)  
 Charles Rose (NC)  
 Glenn English (OK)  
 Leon Panetta (CA)  
 Jerry Huckaby (LA)  
 Dan Glickman (KS)  
 Tony Coelho (CA)  
 Charles Stenholm (TX)  
 Harold Volkmer (MO)  
 Charles Hatcher (GA)  
 Robin Tallon (SC)  
 Harley Staggers, JR. (WV)  
 Lane Evans (IL)  
 Robert Lindsay Thomas (GA)  
 Jim Olin (VA)  
 Timothy Penny (MN)  
 Richard Stallings (ID)  
 • David Nagle (IA)  
 • Jim Jontz (IN)  
 • Tim Johnson (SD)  
 • Claude Harris (AL)  
 • Ben Nighthorse Campbell (CO)  
 • Mike Espy (MS)

### Republicans (17)

Edward Madigan (IL), *Ranking  
 Minority Member*  
 James Jeffords (VT)  
 Tom Coleman (MO)  
 Ron Marlenee (MT)  
 Larry Hopkins (KY)  
 Arlan Stangeland (MN)  
 Pat Roberts (KS)  
 Bill Emerson (MO)  
 Sid Morrison (WA)  
 Steve Gunderson (WI)  
 Tom Lewis (FL)  
 Robert Smith (OR)  
 Larry Combest (TX)  
 Bill Schuette (MI)  
 • Fred Grandy (IA)  
 • Wally Herger (CA)  
 • Clyde Holloway (LA)

### Subcommittees:

#### Wheat, Soybeans, and Feed Grains

Dan Glickman, *Chairman*  
 Ron Marlenee, *Ranking  
 Minority Member*

#### Livestock, Dairy, and Poultry

Charles Stenholm, *Chairman*  
 James Jeffords, *Ranking  
 Minority Member*

#### Cotton, Rice, and Sugar

Jerry Huckaby, *Chairman*  
 Arlan Stangeland, *Ranking  
 Minority Member*

#### Tobacco and Peanuts

Charles Rose, *Chairman*  
 Larry Hopkins, *Ranking  
 Minority Member*

#### Conservation, Credit, and Rural Development

Ed Jones, *Chairman*  
 Tom Coleman, *Ranking Minority Member*

#### Department Operations, Research, and Foreign Agriculture

George Brown, *Chairman*  
 Pat Roberts, *Ranking Minority Member*

#### Domestic Marketing, Consumer Relations, and Nutrition

Leon Panetta, *Chairman*  
 Bill Emerson, *Ranking Minority Member*

#### Forests, Family Farms, and Energy

Harold Volkmer, *Chairman*  
 Sid Morrison, *Ranking Minority Member*

## U.S. Senate Committee on Agriculture, Nutrition, and Forestry

### Democrats (10)

Patrick Leahy (VT), *Chairman*  
 Ed Zorinsky (NE)  
 John Melcher (MT)  
 David Pryor (AR)  
 David Boren (OK)  
 Howell Heflin (AL)  
 Tom Harkin (IA)  
 • Kent Conrad (ND)  
 • Wyche Fowler (GA)  
 • Tom Daschle (SD)

### Republicans (8)

Richard Lugar (IN), *Ranking  
 Minority Member*  
 Robert Dole (KS)  
 Jesse Helms (NC)  
 Thad Cochran (MS)  
 Rudy Boschwitz (MN)  
 Mitch McConnell (KY)  
 • Christopher Bond (MO)  
 Pete Wilson (CA)

### Subcommittees:

#### Agricultural Productivity and Stabilization of Prices

Ed Zorinsky, *Chairman*  
 Jesse Helms, *Minority leader*

#### Agricultural Research, Conservation, Forestry, and General Legislation

John Melcher, *Chairman*  
 Christopher Bond, *Minority leader*

#### Domestic and Foreign Marketing and Product Promotion

David Pryor, *Chairman*  
 Thad Cochran, *Minority leader*

#### Agricultural Credit

David Boren, *Chairman*  
 Rudy Boschwitz, *Minority leader*

#### Rural Development and Rural Electrification

Howell Heflin, *Chairman*  
 Mitch McConnell, *Minority leader*

#### Nutrition and Investigations

Tom Harkin, *Chairman*  
 Robert Dole, *Minority leader*

## U.S. House of Representatives Committee on Appropriations

### Subcommittee on Rural Development, Agriculture, and Related Agencies

Jamie Whitten (MS), *Chairman*  
 Bob Traxler (MI)  
 Matthew McHugh (NY)  
 William Natcher (KY)  
 Daniel Akaka (HI)  
 Wes Watkins (OK)  
 Richard Durbin (IL)  
 Neal Smith (IA)

Virginia Smith (NE), *Ranking  
 Minority Member*

John Myers (IN)  
 Joe Skeen (NM)  
 • Vin Weber (MN)

## U.S. Senate Committee on Appropriations

### Subcommittee on Agriculture, Rural Development, and Related Agencies

Quentin Burdick (ND), *Chairman*  
 John Stennis (MS)  
 Lawton Chiles (FL)  
 Jim Sasser (TN)  
 Dale Bumpers (AR)  
 Tom Harkin (IA)

Thad Cochran (MS), *Ranking  
 Minority Member*

James McClure (ID)  
 Robert Kasten (WI)  
 Arlen Specter (PA)  
 • Charles Grassley (IA)

• New Committee or Subcommittee members

the Food Security Act, the so-called Findley portion<sup>1</sup> of the deficiency calculation, disaster payments, and marketing loans are exempt from the \$50,000 limit. Also, the Administration has proposed major reforms in the sugar program. These would reduce the loan rate for sugar to 12 cents per pound, beginning with the 1987 crop, and give sugar producers a "transition payment" of 6 cents per pound in 1988, which would be phased out over 4 years.

#### *In House, Ag Committee Alumni Move Up*

In the House of Representatives, the Committee on Agriculture retains its ratio of 26 Democrats to 17 Republicans. Kika de la Garza from Texas and Ed Madigan from Illinois continue as Chairman and ranking minority member, respectively. Tom Foley from Washington state has moved from Majority Whip to Majority Leader and has left the Agriculture Committee. Tony Coelho of California, now House Majority Whip, has retained his seat on the committee, but has given up chairmanship of the Subcommittee on Livestock, Dairy, and Poultry.

House subcommittees generally play a larger role in determining policy than their Senate counterparts. For example, during the 1985 Farm Bill debate, the Senate Agriculture Committee drafted its bill in full committee. The House Agriculture Committee, on the other hand, first had its subcommittees draft sections of the bill, which were then debated by the full committee. Representatives Jerry Huckaby, Charles Rose, Ed Jones, and Leon Panetta retain their subcommittee chairmanships.

Dan Glickman replaces Mr. Foley as Chairman of the Wheat, Soybeans, and Feed Grains Subcommittee. Mr. Glickman has indicated that the subcommittee would hold extensive hearings on policy options in the 1985 farm bill. Charles Stenholm replaces Mr. Coelho as Chairman of the Livestock, Dairy, and Poultry Subcommittee. Congressman Stenholm—leader of the so-called Boll Weevil Democrats—is a fiscal conservative who favors reduced Government spending.

Representative George Brown, a scientist by training, is again Chairman of the Department Operations, Research, and Foreign Agriculture Subcommittee, a position he held prior to the 99th Congress. Congressman Harold Volkmer, a supporter of synthetic fuel development, is the new Chairman of the Subcommittee on Forests, Family Farms, and Energy, replacing Charles Whitley, who retired.

In the House, mandatory production controls received a fair amount of discussion during the 99th Congress. Congressman Richard Gephardt introduced legislation similar to that of Senator Harkin. A few agriculture committee members—Glenn English, Lane Evans, Timothy Penny, and Harold Volkmer—were cosponsors. Production controls, however, lost two vocal House spokesmen at the end of the 99th Congress when Berkley Bedell retired and Tom Daschle was elected to the Senate.

<sup>1</sup>The Findley Amendment allows the Secretary of Agriculture to lower wheat and feed grain loan rates up to 20 percent to achieve export price competitiveness.

Representatives Glenn English and Arlan Stangeland have introduced different bills that would continue to separate wheat and feed grains production and deficiency payments. The legislation would change the 50/92 provisions of the Food Security Act to a 0/92 or a 0/100 option. Mr. English's bill would also freeze current target prices for 3 years if producers agreed not to plant any wheat or feed grains during that time. A proposal, like that of Senator Boschwitz, to completely decouple production and payments has not emerged in the House.

The extent of support for or opposition to Administration proposals is unknown at this time. However, one of the main goals of the Agriculture Committee during the 99th Congress was to maintain farm income by freezing target prices. The Administration, therefore, is likely to face stiff opposition to its target-price reduction proposal. In a speech before the National Council of Farmer Cooperatives, Congressman Glickman said the Administration's proposals are not likely to succeed in Congress.

Marketing loans for wheat, feed grains, and soybeans were debated in the 99th Congress and are likely to be a topic of discussion in the 100th Congress. Representative Hal Daub of Nebraska has introduced legislation that would require the Secretary to implement a marketing loan program for wheat, feed grain, and soybeans, allowing farmers to repay loans at the lower of the loan rate or world prices. Senator Cochran has also introduced similar legislation for soybeans in the Senate.

At the end of the 99th Congress, Representative Silvio Conte added an amendment to the 1987 Appropriations Bill limiting several types of program payments to a total of \$250,000. Included in this limit are disaster payments, Findley deficiency payments, and gains made from repaying marketing loans at lower rates. Also included is the regular \$50,000 payment limit on deficiency and diversion payments. Mr. Conte, the ranking minority member of the House Appropriations Committee, was upset by reports of large amounts of money going to a few producers. Mr. Glickman has indicated that his subcommittee will examine the payment limit issue during the early months of this year.

Related issues—targeting deficiency payments to certain types of producers, and tightening the Department of Agriculture's definition of a "person"—are certain to appear in the 100th Congress. One method of targeting is to set a higher target price for a producer's initial production—20,000 or 30,000 bushels—and a lower rate for the remainder of the crop. Mr. Stangeland's bill contains such a proposal for wheat and feed grains.

In addition to the House and Senate agriculture committees, the Appropriations subcommittees are also important for developing agricultural policy in Congress. In the House, Representative Jamie Whitten of Mississippi continues to serve not only as Chairman of the Appropriations Committee, but also as Chairman of its subcommittee on agriculture. On the Senate side, Quentin Burdick of North Dakota succeeds Senator Thad Cochran of Mississippi as Chairman of that important subcommittee. (Tom Fulton and Lewrene Glaser (202) 786-1780)





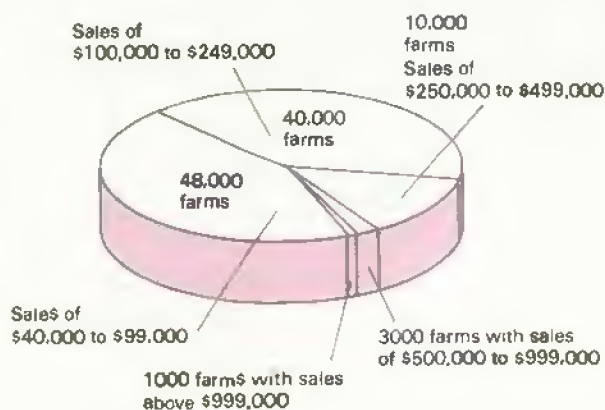
## Agricultural Debt at Risk: How Much Do Farm Lenders Stand to Lose?

Many commercial-size farmers are experiencing severe financial stress as the agricultural sector adjusts to lower prices. These difficulties are shared by farm lenders as interest and principal payments are disrupted. How many farmers are experiencing financial stress? How much money might be lost by lenders, including the Farmers Home Administration (FmHA) and the Farm Credit System (FCS), if these farm businesses fail? Answers about potential losses on all loans made to the farm sector are not available, but estimates of losses on loans comprising about one-half of the farm business debt of \$192 billion owed in 1985 are presented here.

Operators can be categorized according to whether they are making full, partial, or no payment on current principal and interest obligations, and according to the severity of their debt loads. The higher a farmer's debts relative to assets, the more difficulty that operator will have in meeting debt service requirements. A weakening of financial position occurs as the ratio of debt to assets increases from .4-.7 (high debt), to .7-1.0 (very high debt), to more than 1.0 (technically insolvent).

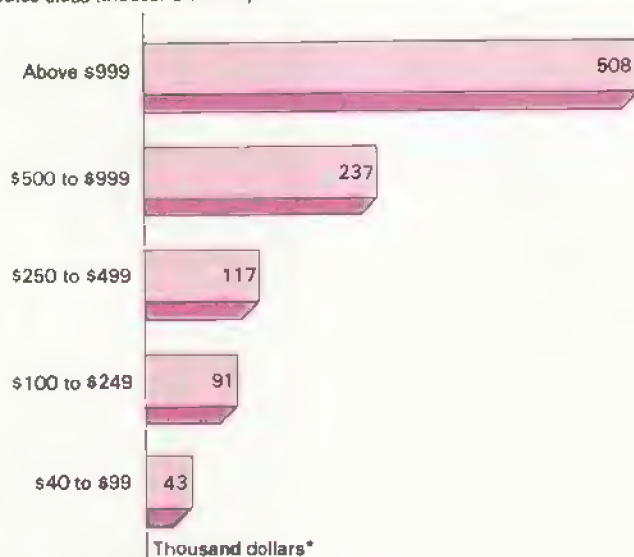
Whether a farmer is experiencing financial stress depends upon the interaction of debt service (full, partial, or no payment of principal and interest) and debt position (the balance sheet relationship of debts to assets). Farmers who are technically insolvent are obviously in danger of going out of business. Farmers with very high debts who are unable to fully service their interest and principal payments, and farmers with high debts who can meet none of their debt service obligations, are also classified as experiencing financial stress.

Most Financially Stressed Operators Had Sales Between \$40,000 and \$249,000



## The Biggest Farms Have the Biggest Potential Losses

Sales class (thousand dollars)



\* Average potential loss per farm on loans to financially stressed farms

Based on this categorization scheme, about 102,000 of about 670,000 commercial-size operators experienced financial stress in early 1986. Another 170,000 operators with no or low debt were unable to meet all financial obligations after covering family living expenses. However, these 170,000 farmers' problems will probably not result in financial stress severe enough to threaten their farm businesses, since these farmers have the financial strength to withstand extended periods of low prices and incomes.

The 102,000 operators classified as financially stressed, about 15 percent of the total, owed \$33 billion of the \$94 billion of business debt owed by commercial-size operators

## Characteristics of Stressed Commercial-size Operators

Operators at risk of not being able to repay their loans tend to be younger and to have more dependents and more years of college education. They also have less nonfarm income and are slightly more likely to be full-time farmers.

The sales and assets of financially stressed operators were substantially smaller than average, and financially stressed operators tended to start farming more recently. One of the most critical differences between farmers who were financially stressed and those that were not is that stressed operators paid more than twice the interest, compared to their sales. Stressed operators had a smaller share of assets in real estate, but paid proportionally more interest because they purchased land at higher prices, had a smaller equity share, and/or paid higher real estate interest rates.

About 1 of every 4 operators that began farming in the 1970's, and was still farming in early 1986, faces the potential of not being able to repay loans. This increases to 1 of 3 for those who started farming in the 1980's. Stressed farmers tend to have 2 to 3 times more debt than nonstressed farmers that began farming at a similar time.

Nearly 4 of 5 financially strong operators began farming prior to 1970, have average equity of about \$500,000, and have average debt between \$100,000 and \$135,000. Nearly 1 of 2 operators facing possible losses on loans began farming after 1970. Only the stressed operators that started farming before 1960 had average equity greater than about \$20,000. More than 1 of 3 stressed operators began farming in the 1970's, and typically have negative equity. Stressed farmers that began farming after 1980 appear to be limiting their use of debt. However, their debt is double that of non-stressed operators that began farming after 1980.

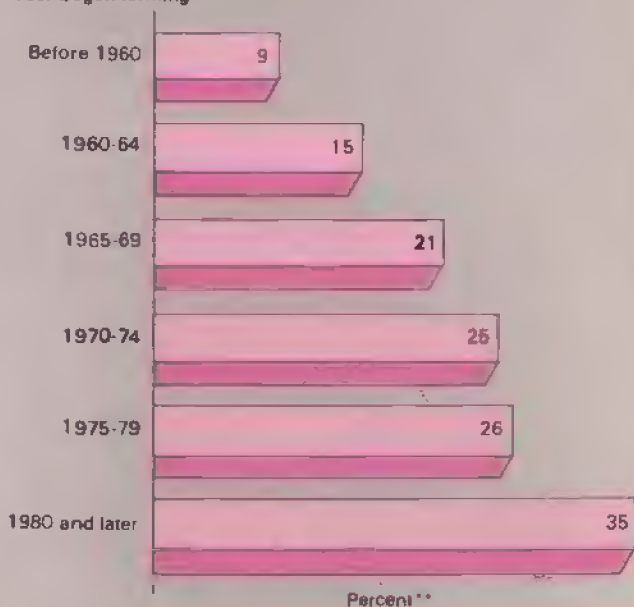
## Socioeconomic Comparisons of Financially Stressed and Nonstressed Farmers

	Nonstressed operators	Stressed operators
Average		
Age	49	41
Education: some college	35%	41%
Number of dependents	3.2	3.7
Off-farm income	\$17,393	\$10,349
Real estate share of assets	66%	54%
Debt	\$108,779	\$320,712
Interest expense per year	\$14,026	\$28,836 <sup>1/</sup>
Farm business net cashflow <sup>2/</sup>	\$40,094	-\$10,526
Interest expense to sales	10%	22%

<sup>1/</sup> Does not include unpaid interest expense.  
<sup>2/</sup> Cash farm income less cash business expense.

## More Farmers\* Who Started Recently Are Experiencing Financial Stress

Year began farming



\*Sole proprietors.

\*\*Of farmers who began in each period who are financially stressed

## More Stressed Operators Started Farming Later <sup>1/</sup>

Year began farming <sup>2/</sup>	Share of operators stressed	Non-stressed (Financially strong)		Stressed (with potential loan losses)		
		Avg. debt	Avg. equity	Avg. debt	Avg. equity	
	Per-cent	Per-cent	Thousand dollars	Per-cent	Thousand dollars	
Before 1960	9	57	99 486	31	370	78
1960-64	14	10	134 485	10	403	16
1965-69	19	10	135 500	14	326	19
1970-74	25	11	116 384	19	362	0
1975-79	27	8	120 303	16	238	-11
1980 & later	31	4	71 255	10	139	22
		100		100		

<sup>1/</sup> All operators, including sole proprietors.

<sup>2/</sup> Year began farming was estimated based on operator age and years of education information in the Farm Costs and Returns Survey.



## One-Sixth of Commercial Family Farms Have One-Third of the Debt

Debt service category*	Debt to asset ratio					All	
	No debt (0)	Low debt (0-.4)	High debt (.4-.7)	Very high debt (.7-1.0)	Insolvent (more than 1.0)		
Full service						367,303 40,284	Farms Debt (\$ mil.)
Partial service	564,907 farms \$61,450 million debt			101,614 farms \$32,800 million debt at risk \$8,110 million potential lender losses		122,100 34,150	Farms Debt (\$ mil.)
No service						177,118 19,605	Farms Debt (\$ mil.)
All	144,652 0	306,551 29,135	122,868 31,685	48,617 16,857	43,833 16,362	666,521 94,039	Farms ** Debt (\$ mil.)

\*tion of principal and interest paid on schedule  
 Surveyed as of early 1986 with sales or value of production greater than \$40,000.

The cash available to service debt includes commodity sales, Government payments, farm-related and off-farm income, less cash operating and capital replacement expenses. The survey represents the business transactions and off-farm income of operators that were active in early 1986. The data do not include information about non-business loans of operators, or financial information on landlords.

Agricultural lenders face potential losses of \$6 to \$10 billion on debt owed by commercial-size operators, with the most probable estimate being \$8.1 billion on loans to the financially stressed operators. This is 25 percent of the stressed operators' debt. Furthermore, about 86 percent of the \$8.1 billion in potential losses is associated with 44,000 technically insolvent operators. Thus, the insolvent 1 out of 15 commercial-size operators with no additional collateral available for increased borrowing account for the great majority of potential losses on agricultural loans.

### Debt At Risk and Potential Lender Loss

Extent of debt service	Debt-to-asset ratio			Total
	.4-.7	.7-1.0	More than 1.0	
Full debt service				
Farms (thousand)			12	12
Debt risk (\$ mil)			4,246	4,246
Loan loss (\$ mil)			1,696	1,696
Partial debt service				
Farms (thousand)	19	17		36
Debt risk (\$ mil)	7,769	7,392		15,161
Loan loss (\$ mil)	637	3,119		3,756
No debt service				
Farms (thousand)	28	12	15	55
Debt risk (\$ mil)	5,839	2,619	4,724	13,182
Loan loss (\$ mil)	292	167	2,205	2,664
	Percent			Thousand
Total farms	27	30	43	102
Debt at risk	18	32	50	\$32,589,126
Potential loan loss	4	10	86	\$8,114,619

Potential loan losses are estimated as the difference between total debt and total assets, in those cases where debt exceeded assets. These adjustments reflect land and commodity deflation which has occurred since January 1, 1986. Land and machinery values were lowered 25 percent, and crop and livestock inventories were dropped 10 percent. Only 5 percent of the debt owed by operators with no debt service and debt-to-asset ratios between .4 and .7 was assumed to represent potential loan losses.

The adjustments also account for typical discounts associated with "forced sales", carrying costs of foreclosed assets, and associated judicial costs. These adjustments do not reflect interest or principal payments past due, or possible malfeasance. These asset valuation adjustments provide a conservative estimate of the extremely costly foreclosure process.

Of the 44,000 technically insolvent farmers, about 12,000 had sufficient cash flow to meet all their financial obligations as of the survey date. High yields and effective cost control will permit many of these farmers to gradually pay down their debts and become solvent. However, because the average debt-to-asset ratio of these 12,000 farmers is 1.3, gaining financial stability could be a lengthy process. Lenders will be reluctant to continue to finance this group. Finally, whether insolvent operators that are successfully paying their bills continue to farm depends on their outlook for the future of agriculture, and on whether they have alternatives other than farming or ranching.

After attempting to adjust for the under-representation of non-commercial-size farms in the survey, potential losses on loans to operators classified as financially stressed are estimated to be \$9 billion, 90 percent of which are on loans to commercial-sized farms. The bulk of these losses will likely be realized during 1986-90. In addition, lenders are still "digesting" the losses on loans to operators who failed prior to early 1986.

in early 1986. In addition, the stressed operators experienced about a \$4.5 billion cash shortfall in 1985.

This information comes from the USDA-NASS Farm Costs and Returns Survey conducted in the winter of 1986. Because this survey can be expanded to represent 98 percent of commercial operators, the focus is on commercial-size operators with sales or production of \$40,000 or more during 1985. This group of about 670,000 farmers is responsible for about 90 percent of gross sales, and derives most of its household income from agriculture.

The average potential loss per stressed farm varies widely, from \$508,000 on farms with sales of \$1,000,000 or more, to \$43,000 on farms with sales between \$40,000 and \$100,000. At the same time, about 97 percent of the insolvent operators had sales between \$40,000 and \$500,000. Thus, while most losses occur on farms with sales of less than \$500,000, the magnitude of loan losses on extremely large operations dwarfs all others.

#### **Lender Exposure to Potential Loan Losses**

The Farmers Home Administration (FmHA), commercial banks, and the Farm Credit System each held more than \$8 billion of the \$33 billion of debt at risk for financially threatened operators in early 1986. More than \$6 billion (75 percent of the total) of potential commercial-operator loan losses was held by FmHA (\$2.7 billion), commercial banks (\$2.1 billion), and Federal Land Banks (FLB's) (\$1.4 billion).

About 63,000 financially stressed commercial-size FmHA borrowers have:

- 28 percent of 223,041 FmHA operator loans
- 58 percent of \$14.3 billion FmHA operator loan value
- 9 percent of \$94 billion operator debt outstanding
- 25 percent of \$32.5 billion financially-stressed-operator debt
- 33 percent of \$8.1 billion potential lender losses

About 58,000 financially stressed commercial-size FCS borrowers have:

- 20 percent of 297,095 FCS operator loans
- 28 percent of \$28.5 billion FCS operator loan value

- 9 percent of \$94 billion operator debt outstanding
- 25 percent of \$32.6 billion financially-stressed-operator debt
- 23 percent of \$8.1 billion potential lender losses

Two of the largest lenders in agriculture, FCS and FmHA, are associated with the Government through initial sponsorship or direct lending. Since the FmHA has traditionally been the lender of last resort to farmers unable to secure credit elsewhere, it is not surprising that FmHA loan losses are potentially the largest, and that a greater proportion of its loan portfolio is in jeopardy. The extent of FmHA's difficulties is evident in that nearly \$3 of every \$5 of FmHA operator loans is at risk of loss.

#### **Potential Losses on Loans by FCS and FmHA**

FCS district	Potential loss		Lender's share of potential losses in district	
	FCS	FmHA	FCS	FmHA
	Million dollars		Percent	
Columbia	118	265	25	57
Jackson	81	166	24	48
St. Louis	134	308	17	38
Omaha	308	593	19	36
Texas	40	141	12	43
Baltimore	63	68	30	33
Wichita	263	325	25	30
St. Paul	449	504	23	26
Louisville	123	102	30	25
Sacramento	186	97	41	21
Spokane	99	90	27	25
Springfield	40	12	41	13
United States	1,904	2,670	23	33

Potential losses only include commercial-size operators in business as of January 1, 1986.

#### **Lenders' Potential Loan Losses**

Lender	Debt at risk*	Potential loan loss	Loan loss share of individual lender debt at risk
	Million dollars		Percent
Farmers Home Administration	8,239	2,670	33
Commercial banks	8,167	2,069	25
Individuals	3,721	943	25
Farm Credit System 1/	8,081	1,903	24
Other	2,328	529	23
Commodity Credit Corporation	2,052	0	0
All lenders	32,589	8,115	25

\*Loans to financially stressed commercial-size operators.

1/ Includes Federal Land Banks with \$6,045 million debt at risk and \$1,351 million potential loan losses, and Production Credit Associations with \$2,036 million debt at risk and \$552 million potential loan losses.

Potential losses on FmHA loans comprise about half of all potential losses on loans to on-going operators in the Southeast (Columbia and Jackson districts). However, the largest dollar amount is on loans to farmers in the Midwest, where the bulk of commercial, family farm agriculture is located.

The largest potential losses for the FCS are on loans in the St. Paul and Omaha districts. However, as a percent of debt at risk, losses in the Southeast have the potential to be greater than average. Only about 28 percent of all operator loans made by FCS to survey respondents was owed by financially stressed farmers, compared with 58 percent for FmHA.

#### **Potential Loan Losses by Region and Enterprise**

Of the \$8.1 billion in potential loan losses on the 102,000 operators identified as financially stressed, the largest dollar value could occur in the Midwest and Plains States. However, losses as a proportion of total loans could be greatest in the Delta and the Southeast. In the Southeast, the share of debt on which no interest or principal payments are being made is twice the level in the Midwest and Plains States. While the \$1.9 billion in potential loan losses in the Corn Belt is the highest of any region, only 15 percent of the 176,000 large Corn Belt farms were finan-



cially stressed, compared to 20 percent of the 105,000 large Lake State farms and 20 percent of the 22,000 large Delta farms.

More than one-third of the \$8.1 billion in potential losses could occur among 33,000 corn and soybean operators. The two farm types, corn/soybeans, and hogs/corn, together could account for 44 percent of the losses.

Projected losses on loans to beef producers are among the largest on a per-operator basis. \$103,000. Forty percent of the beef producers' debt at risk was not serviced in 1985. For the 3,600 financially stressed cotton and rice farmers, debts exceed adjusted asset values by an average of \$143,000 per farmer. This group's potential loss is nearly 80 percent greater than the average. In terms of the proportion of operators financially stressed, projected losses per farm, and the share of debt at risk that is not covered by assets, poultry and dairy enterprises appear much better off than other farm types.

#### **Midwest's Problems Will Slowly Stabilize**

It will take several years before the large losses on loans in the Midwest work their way through the process of foreclosure, restructuring, or full recovery. However, financial conditions in this hard-hit region may improve in the remainder of the 1980's. Both corn and soybean yields were record high in the Midwest in 1985 and 1986. Increases in Government payments and higher hog and cattle prices, along with lower fuel and interest expenses, may improve financial conditions in this region in 1987. Finally, the erosion of asset values associated with a possible land-price decline of 7 percent in 1987 would be about one-third the annual land-value losses which occurred in the early 1980's.

#### **Stress Conditions Shifting South**

On an individual basis, both potential losses on loans and the proportion of debt unserviced have been highest in the South. This is because low yields and high per-unit costs of production have contributed more to the South's problems than land price declines. Southern producers, in competition with Midwest corn, soybean, and wheat producers, are especially hard-pressed, and the severe 1986 drought in the Southeast has worsened financial difficulties. Given these conditions, a substantial increase in FCS and FmHA loan losses in the South is likely.

#### **Big Wave of Stressed Operators Identified in 1984-86**

The condition of financially stressed farmers became more polarized between 1984 and 1985 as the amount of money lenders could lose on loans to insolvent operators increased 13 percent. Potential losses on loans to financially stressed but solvent operators declined 20 percent.

Similarly, the number of insolvent operators increased 32 percent, but the number of solvent but stressed operators declined 28 percent between 1984 and 1985. Therefore, financial problems became critical for about 44,000 commercial-sized insolvent operators, whose financial problems will probably be digested by lenders during the remainder of the 1980's. On the other hand, conditions eased for other farmers, and there was a slight decline in the number of financially stable operators who were becoming financially stressed as of early 1986.

#### **Potential Lender Loss by Region**

Region & Major Enterprises	Operators w/potential loan losses	Potential loan loss			
		Total	Per farmer	Receiving no debt service	Share of debt at risk
	Percent	\$ Mil	\$ Thous.		Percent
Delta Soybeans, rice, cotton	20	466	111	48	35
Appalachia Specialty, dairy	9	311	84	40	28
Southeast Poultry, peanuts, soybeans	13	381	103	65	27
Corn Belt Corn, soybeans, hogs	15	1,923	72	23	26
Pacific Veg. fruit, beef	10	610	165	13	25
Lake Dairy, corn	20	1,573	74	25	25
North Plains Beef, wheat, corn	18	1,464	81	32	24
South Plains Beef, wheat, cotton	17	706	83	62	23
Northeast Dairy	8	202	40	38	20
Mountain Beef, wheat	14	481	80	36	19
United States	15	8,115	80	33	25

However, should commodity and land prices continue to slowly weaken during 1987-88, a new wave of perhaps 40,000 to 60,000 stressed operators will likely become financially stressed by 1989-1990.

#### **Loan Loss Problems Shifting to Lenders**

A permanent default on a loan obligation usually forces a lender to foreclose or restructure debt, resulting in losses to the lender. The health of a farm family's balance sheet may actually improve as farm debt is restructured and a portion of principal is forgiven, or as the lender assumes mortgaged farm assets in the bankruptcy process. However, the process of absorbing loan write-offs may take several years for lenders, and during this period, the returns to bank shareholders can be severely depressed. Thus, improvement in major agricultural lenders' financial health may substantially lag that of farm operators during the remainder of the 1980's. [Greg Hansen (202) 786-1801]

## Troubles Concentrated in the Midwest and South

The 10 States with the most operators with potential loan losses include Iowa and 9 surrounding States, including Oklahoma. Of the 334,000 commercial-size operators in these States in early 1986, 64,000 will likely not be able to meet all their loan obligations, even after liquidating their assets.

Nearly 1 of every 5 operators (19 percent), in these 10 States may not be able to repay loans. These States account for about 64 percent of all operators who may not be able to repay their loans in the contiguous 48 States, and about 60 percent of the \$8.1 billion of potential losses nationwide. Production of cash grains and hogs is concentrated in this area, and there is substantial cattle feeding. In North Dakota, Oklahoma, Minnesota, and Missouri, the incidence of stress is highest—1 of every 4 farmers may experience loan losses.

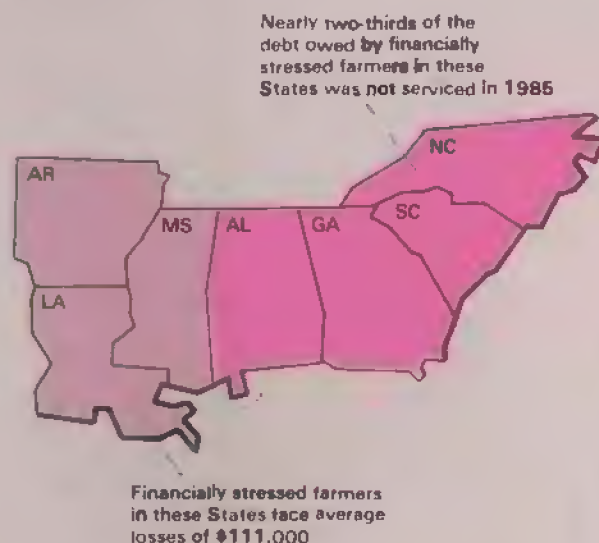
On an individual basis, financial conditions in much of the South may have been more severe than in the Midwest. While the percentage of operators classified as financially stressed was lower in the Southeast and Delta than in the Midwest, potential loan losses per troubled farmer are about \$35,000 higher in Alabama, Georgia, North Carolina, and South Carolina and the Delta, and the proportion of nonserviced debt at risk was twice as large.

Had land prices not declined in the 1980's, lenders' losses on agricultural loans in the Midwest would be approximately 60 percent lower. (This statistic points out the importance of land price stabilization to farmers and lenders.) However, losses in the South would probably be only 30 percent lower if land prices were still at their 1981 peaks.

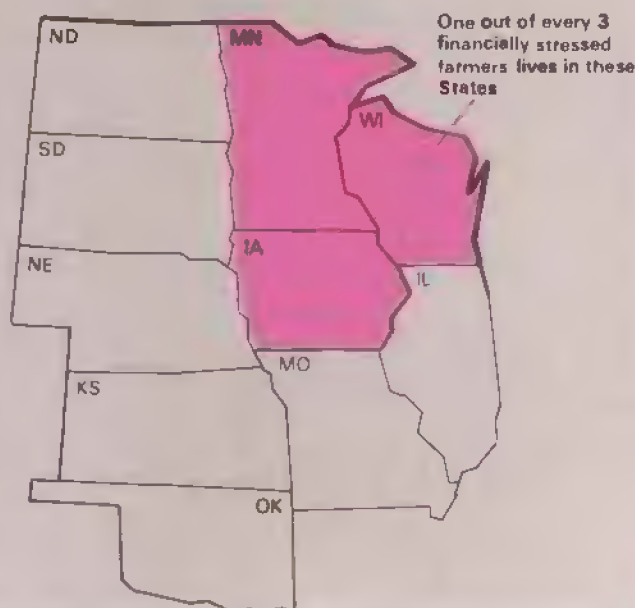
### Lower Land Values Boost Loan Losses

Regions	Debt at risk	Potential loan losses	
		Potential losses	Potential loan losses due to land deflation
		Million dollars	Percent
Delta	1,340	364	284
Southern Plains	2,999	706	509
Southeast	1,420	380	270
Appalachia	1,119	311	214
Pacific	2,473	610	355
Mountain	2,489	481	265
Northeast	1,034	202	103
Northern Plains	6,001	1,463	682
Lake	6,386	1,573	593
Corn Belt	7,329	1,923	694
United States	32,589	8,115	4,050

In These States, Potential Per-Farmer Loan Losses Are 20 to 30 Percent Above Average



Sixty Percent of Operators Who May Not Be Able to Repay Their Debt Live in These 10 Midwest States





## Direct Government Payments to Financially Stressed Farmers

When adjusted for sales level, financially stressed operators received about one third more direct Government payments in 1985 than nonstressed operators. More than two-thirds of farmers who may not be able to repay their debts received direct payments, which averaged about \$9,000 in 1985. Payments are projected to average about \$15,000 in 1986, and perhaps as much as \$17,000 in 1987.

Compared to their sales, stressed livestock operators received twice the rate of direct payments as nonstressed livestock farmers. Stressed crop farms are critically dependent on direct payments. This was particularly true in 1986, and will be so again in 1987. These farms also received substantial CCC loans.

### Direct Payments to Commercial-size Operators

1985	Financially strong operators		Operators threatened by inability to repay debts	
	Dollars	Percent	Dollars	Percent
Average direct payments and share of operators receiving them	7,570	56	9,007	68
Amount of direct payments, and ratio of direct payments to sales:				
All farms	7,570	5	9,007	7
Livestock farms	3,584	2	5,089	4
Crop farms	11,560	9	12,985	11
1986				
Average direct payments, and share of operators receiving them	13,000	70	16,000	80
Amount of direct payments and ratio of direct payments to sales				
All farms	13,000	9	16,000	12
Livestock farms	6,000	4	9,000	8
Crop farms	20,000	15	22,000	18

## Factors Affecting the Estimate of Losses On Loans to Commercial-Size Operators

The estimate of \$8.1 billion in potential losses on loans to financially stressed commercial-size operators in early 1986 is based on several assumptions and judgments. For instance, if the value of assets acquired by lenders through foreclosure did not decline after 1985, and if lenders bore no transaction costs related to loan restructuring and foreclosure, loan losses could be limited to about \$5 billion. If the value of land and machinery which lenders can actually recover through the foreclosure process declined 15 percent, and recoverable crop and livestock inventories dropped only 5 percent, loan losses could be about \$6 billion.

However, if the value of land and machinery which lenders can recover eroded 35 percent, and crop and livestock inventories fell 15 percent, losses on loans could total \$10 billion. Loan losses could climb to \$12 billion for commercial-size operators, if the recoverable value of land and machinery dropped 45 percent, while crop and livestock inventories fell 20 percent.

If the definition of debt service was altered to exclude principal repayment, the current estimate of losses on loans would decline only about 4 percent. Ignoring machinery replacement or family consumption expenses would each lower potential losses about 5 percent.

The \$8.1 billion estimate is also based on current commodity prices, production expenses, and levels of Government support. Changes, especially those that affect farm land prices, will affect loan losses.

The \$8.1-billion estimate does not equal other estimates of potential losses. One reason is that lenders often estimate their losses before selling foreclosed collateral. Further, the decline in the value of assets held as collateral that lenders can recover was assumed constant throughout the United States in this study, even though it may vary across regions.

This analysis is limited to the business debt of commercial-size operators in early 1986, about half of the debt carried in the Balance Sheet of Agriculture. Excluded were the debts of non-commercial-size farmers and landlords, non-business loans of farmers, and institutional loans such as those held by the Bank for Cooperatives (part of the Farm Credit System).

It is likely that the survey data do not fully represent Commodity Credit Corporation loans and loans from individuals. Also, information on principal and interest past due was not available in the survey, and about 3 percent of operator loans were not included because the lender was not identified.

# Statistical Indicators

## Summary Data

Table 1.—Key statistical indicators of the food and fiber sector

	1986					1987				
	I	II	III	IV	Annual	I F	II F	III F	Annual F	
Prices received by farmers (1977=100)	123	122	124	122	123	120	120	121	120	
Livestock & products	133	130	146	144	138	144	142	144	143	
Crops	112	113	101	100	106	98	96	97	97	
Prices paid by farmers, (1977=100)										
Prod. items	149	145	144	142	143	149	146	145	146	
Commodities & services, int., taxes, & wages	163	161	159	158	159	160	160	161	161	
Cash receipts (\$ bil) 1/	129	130	130	146	134	128	122	128	129	
Livestock (\$ bil)	66	67	75	76	71	69	70	73	71	
Crops (\$ bil)	63	64	55	70	63	59	52	55	58	
Market basket (1967=100)										
Retail cost	285	284	292	294	289	—	—	—	—	
Farm value	226	222	244	243	234	—	—	—	—	
Spread	319	320	319	324	321	—	—	—	—	
Farm value/retail cost (%)	30	29	31	30	30	—	—	—	—	
Retail prices (1967=100)										
Food	315	317	322	324	320	325	326	—	326-333	
At home	302	302	308	310	305	310	310	—	311-317	
Away-from home	354	359	362	366	360	367	371	—	371-378	
Agricultural exports (\$ bil) 2/	7.4	5.7	5.5	7.7	26.3	7.1	5.8	5.4	26.0	
Agricultural imports (\$ bil) 2/	5.6	5.4	5.0	5.1	20.9	5.3	5.0	4.6	20.0	
Production:										
Red meats (mil lb)	9,551	10,021	9,722	9,742	39,036	9,267	9,378	9,385	37,455	
Poultry (mil lb)	4,107	4,536	4,685	4,602	17,930	4,395	4,845	5,015	19,175	
Eggs (mil doz)	1,422	1,421	1,413	1,458	5,716	1,435	1,430	1,425	5,765	
Milk (bil lbl)	36.2	38.5	35.9	34.2	144.9	35.1	37.5	35.3	141.8	
Consumption, per capita:										
Red meats and poultry (lbs)	51.9	54.1	53.9	54.4	214.3	51.5	52.9	52.9	213.2	
Corn beginning stocks (mil bu) 3/	8,614.7	6,587.1	4,990.0	4,038.1	4,038.1	—	—	—	—	
Corn use (mil bu) 3/	2,028.9	1,599.4	956.5	1,990.1	6,575.0	—	—	—	—	
Prices: 4/										
Choice steers—Omaha (\$/cwt)	57.22	54.52	58.91	60.36	57.75	60-62	63-67	61-67	61-67	
Barrows and gilts—7 mths. (\$/cwt)	43.30	47.23	61.13	53.08	51.19	48-50	48-52	49-55	47-53	
Broilers—12-city (cts/lb)	50.3	54.3	66.6	56.2	56.9	51-53	52-56	51-57	50-56	
Eggs—NY Gr. A large (cts/doz)	74.2	63.4	72.8	74.0	71.1	65-67	63-67	65-71	64-70	
Milk—all at plant (\$/cwt)	12.37	11.97	12.30	13.30	12.48	12.25-12.75	11.65-12.05	11.85-12.55	12.05-12.65	
Wheat—Kansas city HRW (\$/bu)	3.33	3.22	2.50	2.65	2.93	—	—	—	—	
Corn—Chicago (\$/bu)	2.48	2.51	1.72	1.62	2.08	—	—	—	—	
Soybeans—Chicago (\$/bu)	5.34	5.32	4.90	4.85	5.12	—	—	—	—	
Cotton—Avg. spot mkt. (cts/lb)	60.0	63.9	63.1	48.0	53.5	—	—	—	—	
	1979	1980	1981	1982	1983	1984	1985	1986 F	1987 F	
Gross cash income (\$ bil)	135.1	143.3	146.0	150.6	150.2	154.9	156.2	150	150	
Gross cash expenses (\$ bil)	101.7	109.1	113.2	113.8	113.0	115.6	112.1	106	103	
Net cash income (\$ bil)	33.4	34.2	32.8	36.8	37.1	39.3	44.0	44	47	
Net farm income	27.4	16.1	26.9	22.7	13.0	32.7	30.5	29	32	
Farm real estate values (1977=100)	125	145	158	157	148	146	128	112	101	

1/ Quarterly data seasonally adjusted at annual rates. 2/ Annual data based on Oct.-Sept. fiscal years ending with year indicated.  
 3/ Dec.-Feb. first quarter; Mar.-May second quarter; June-Aug. third quarter; Sept.-Nov. fourth quarter; food year annual. Use includes exports and domestic disappearance. 4/ Simple averages. F = forecast.



Table 2.—U.S. gross national product and related data

	Annual		1985		1986			
	1984	1985	1986 P	IV	I	II	III R	IV P
\$ billion (Quarterly data seasonally adjusted at annual rates)								
Gross national product	3,765.0	3,998.1	4,208.5	4,087.7	4,149.2	4,175.6	4,240.7	4,268.4
Personal consumption expenditures	2,428.2	2,600.5	2,762.4	2,667.9	2,697.9	2,732.0	2,799.8	2,819.9
Durable goods	331.2	359.3	388.3	362.0	360.8	373.9	414.5	404.2
Nondurable goods	870.1	905.1	932.7	922.6	929.7	928.4	932.8	940.0
Clothing & shoes	147.2	155.2	164.8	158.7	161.3	165.0	166.6	166.2
Food & beverages	449.9	469.3	492.8	477.4	484.6	490.3	494.0	502.2
Services	1,227.0	1,336.1	1,441.3	1,383.2	1,407.4	1,429.8	1,452.4	1,475.7
Gross private domestic investment	662.1	661.1	686.4	669.5	708.3	687.3	675.8	674.5
Fixed investment	598.0	650.0	675.1	672.6	664.4	672.8	680.3	682.7
Change in business inventories	64.1	11.1	11.4	-3.1	43.8	14.5	-4.5	-8.3
Net exports of goods & services	-58.7	-78.9	-105.7	-105.3	-93.7	-104.5	-108.9	-115.6
Government purchases of goods & services	733.4	815.4	865.3	855.6	836.7	860.8	874.0	889.7
1982 \$ billion (Quarterly data seasonally adjusted at annual rates)								
Gross national product	3,489.9	3,585.2	3,676.5	3,622.3	3,655.9	3,661.4	3,686.4	3,702.4
Personal consumption expenditures	2,246.3	2,324.5	2,418.6	2,351.7	2,372.7	2,408.4	2,448.0	2,445.1
Durable goods	318.9	343.9	368.9	347.0	345.4	357.1	391.6	381.3
Nondurable goods	828.6	841.6	872.4	847.2	860.6	877.3	875.4	876.2
Clothing & shoes	142.7	146.0	155.5	147.5	152.4	157.1	157.7	154.6
Food & beverages	424.2	433.4	440.7	435.1	441.1	444.2	437.9	439.5
Services	1,098.7	1,139.0	1,177.3	1,157.5	1,166.6	1,174.0	1,181.0	1,187.6
Gross private domestic investment	652.0	647.7	659.7	653.2	684.0	664.7	651.3	638.8
Fixed investment	592.8	638.6	648.9	658.4	644.1	649.6	651.6	650.3
Change in business inventories	59.2	9.0	10.8	-5.2	39.9	15.1	-0.3	-11.5
Net exports of goods & services	-83.6	-108.2	-149.7	-132.0	-125.9	-153.9	-163.3	-155.6
Government purchases of goods & services	675.2	721.2	748.0	749.4	725.2	742.2	750.4	774.1
GNP implicit price deflator								
% change	3.8	3.3	2.7	3.6	2.5	1.8	3.6	1.0
Disposable personal income (\$bil)	2,670.6	2,828.0	2,973.7	2,882.2	2,935.1	2,978.5	2,979.9	3,001.2
Disposable per. income (1982 \$bil)	2,470.6	2,528.0	2,603.7	2,540.7	2,581.2	2,625.7	2,605.5	2,602.3
Per capita disposable per. income (\$)	11,265	11,817	12,312	11,999	12,193	12,348	12,324	12,382
Per capita dis. per. income (1982 \$)	10,421	10,563	10,780	10,577	10,723	10,886	10,776	10,737
U.S. population, total, incl. military								
abroad (mil)	237.1	239.3	241.5	240.2	240.7	241.2	241.8	242.4
Civilian population (mil)	234.9	237.0	234.3	237.9	238.5	239.0	239.6	240.2
	Annual		1985		1986			
	1984	1985	1986 P	Dec	Sept	Oct	Nov	Dec
Monthly data seasonally adjusted								
Industrial production (1977=100)	121.4	123.8	125.1	125.6	124.9	125.3	126.0	126.6
Leading economic indicators (1967=100)	165.8	169.1	178.8	173.6	179.4	180.6	182.2	186.1
Civilian employment (mil. persons)	105.0	107.2	109.8	108.1	109.9	110.2	110.4	110.6
Civilian unemployment rate (%)	7.5	7.2	7.0	7.0	7.0	6.9	6.9	6.7
Personal income (\$ bil annual rate)	3,110.2	3,314.5	3,487.0	3,418.0	3,507.9	3,518.8	3,526.6	3,554.8
Money stock-M2 (daily avg) (\$bil) 1/	2,373.7	2,566.5	2,804.0	2,566.5	2,740.8	2,765.2	2,781.5	2,804.0
Three-month Treasury bill rate (%)	9.58	7.48	5.98	7.07	5.19	5.18	5.35	5.49
Aaa corporate bond yield (Moody's) (%)	12.71	11.37	9.02	10.16	8.89	8.86	8.68	8.49
Housing starts (thou) 2/	1,750	1,742	1,807	1,882	1,664	1,628	1,585	1,802
Auto sales at retail, total (mil)	10.4	11.0	11.5	11.3	16.1	10.3	10.5	13.6
Business inventory/sales ratio	1.34	1.37	1.37	1.35	1.33	1.36	1.35	—
Sales of all retail stores (\$ bil)	107.8	114.5	117.8	116.7	128.0	121.7	120.9 P	126.3
Nondurable goods stores (\$ bil)	68.9	71.6	71.6	73.1	73.5	74.0	74.2 P	74.8
Food stores (\$ bil)	22.5	23.5	24.5	24.3	24.5	24.8	25.0 P	25.2
Eating & drinking places (\$ bil)	10.4	10.9	11.7	11.1	11.9	12.1	12.2 P	12.3
Apparel & accessory stores (\$ bil)	5.4	5.8	6.2	6.0	6.3	6.4	6.3 P	6.4

1/ Annual data as of December of the year listed. 2/ Private, including farm. P = preliminary. R = revised.

Information contact: James Malley (202) 786-1283.

Table 3.—Foreign economic growth, inflation, and export earnings<sup>1,2</sup>

	Average 1970-74	Average 1975-79	1980	1981	1982	1983	1984	1985	1986 est.
Annual percent change									
Total foreign									
Real GNP	5.5	3.7	2.6	1.6	1.7	1.9	3.2	2.9	2.6
CPI	10.2	14.0	16.7	15.8	14.4	18.7	21.3	21.0	11.2
Export earnings	27.5	14.6	22.6	-2.2	-7.0	-2.6	5.5	1.6	—
Developed less U.S.									
Real GNP	4.8	3.1	2.3	1.3	1.1	1.9	3.5	3.1	2.5
CPI	8.4	9.4	10.9	9.6	8.1	6.1	5.1	4.6	2.8
Export earnings	23.9	14.9	17.0	-3.3	-4.2	-0.5	6.1	4.9	—
Centrally planned									
Real GNP	5.1	3.5	1.5	2.1	2.7	3.4	3.7	3.0	3.4
Export earnings	19.4	16.1	16.5	3.4	6.0	8.2	1.5	-5.1	—
Latin America									
Real GNP	7.4	5.1	5.3	0.7	-0.5	-2.7	3.2	3.6	3.1
CPI	23.5	53.7	61.3	64.9	72.6	126.2	174.3	179.6	86.3
Export earnings	28.1	12.8	30.1	4.8	-10.0	0.0	6.7	-5.8	—
Africa & Middle East									
Real GNP	8.9	6.4	1.3	0.0	1.4	0.1	0.2	0.6	-1.0
CPI	8.7	16.4	22.1	19.7	12.0	19.0	5.9	4.7	8.3
Export earnings	49.6	43.2	38.5	-7.0	-19.8	-17.3	-7.0	-8.5	—
Asia									
Real GNP	6.0	6.8	6.3	6.6	3.6	6.6	5.6	3.2	4.1
CPI	13.0	8.4	16.4	14.1	7.3	7.7	8.5	4.9	4.9
Export earnings	30.1	19.4	27.3	5.0	-0.6	3.8	13.7	-3.5	—

Information contact: Edward Wilson (202) 786-1688.

## Farm Prices

Table 4.—Indexes of prices received and paid by farmers, U.S. average

	Annual			1986							1987
	1984	1985	1986 P	Jan	Aug	Sept	Oct	Nov R	Dec P	Jan P	
1977=100											
Prices received											
All farm products	142	128	123	124	125	122	121	124	121	119	
All crops	138	120	106	113	101	97	97	103	99	99	
Food grains	144	133	109	133	90	91	92	97	99	97	
Feed grains & hay	145	122	98	114	87	77	76	79	80	77	
Feed grains	148	122	96	114	84	73	72	76	77	74	
Cotton	108	93	91	89	77	79	78	89	90	81	
Tobacco	153	154	138	146	128	136	130	131	131	130	
Oil-bearing crops	109	84	77	77	78	75	72	76	76	74	
Fruit, all	200	183	168	158	182	176	184	192	170	165	
Fresh market 1/	218	196	176	165	193	184	193	203	177	171	
Commercial vegetables	135	128	130	137	122	130	131	146	120	149	
Fresh market	133	123	123	131	113	125	123	142	112	147	
Potatoes & dry beans	157	125	114	87	138	109	113	119	125	123	
Livestock & products	146	136	138	135	149	146	145	145	141	139	
Meat animals	151	142	145	141	157	155	150	150	146	149	
Dairy products	139	131	129	129	126	131	135	138	138	137	
Poultry & eggs	135	119	129	122	151	138	139	136	124	118	
Prices paid											
Commodities & services,											
interest, taxes, & wage rates	164	163	159	161	—	—	160	—	—	159	
Production items	155	151	146	149	—	—	142	—	—	143	
Feed	135	116	108	114	—	—	99	—	—	99	
Feeder livestock	154	154	153	148	—	—	160	—	—	164	
Seed	151	153	148	154	—	—	146	—	—	146	
Fertilizer	143	135	124	128	—	—	116	—	—	116	
Agricultural chemicals	128	128	127	128	—	—	126	—	—	126	
Fuels & energy	201	201	168	199	—	—	150	—	—	158	
Farm & motor supplies	147	146	144	145	—	—	143	—	—	143	
Autos & trucks	182	193	190	198	—	—	199	—	—	197	
Tractors & self-propelled machinery	181	178	174	174	—	—	172	—	—	172	
Other machinery	180	183	184	184	—	—	184	—	—	184	
Building & fencing	138	136	136	136	—	—	136	—	—	136	
Farm services & cash rent	149	150	150	150	—	—	148	—	—	148	
Interest payable per acre on farm real estate debt	255	242	213	214	—	—	207	—	—	207	
Taxes payable per acre on farm real estate	132	133	134	134	—	—	136	—	—	136	
Wage rates (seasonally adjusted)	151	154	159	150	—	—	159	—	—	159	
Production items, interest, taxes, & wage rates	161	157	151	153	—	—	149	—	—	149	
Ratio, prices received to prices paid 2/	86	79	77	77	79	77	77	78	77	75	
Prices received (1910-14=100)	650	586	561	567	573	559	555	568	551	546	
Prices paid, etc. (Parity index) (1910-14=100)	1,132	1,120	1,097	1,109	—	—	1,089	—	—	1,091	
Parity ratio (1910-14=100) 2/	58	52	51	51	—	—	51	—	—	50	

1/ Fresh market for noncitrus; fresh market and processing for citrus. 2/ Ratio of index of prices received for all farm products to index of prices paid for commodities and services, interest, taxes, and wage rates. Ratio derived using the most recent prices paid index. Prices paid data will be published in January, April, July, and October. P = preliminary. R = revised.

Information contact: National Agricultural Statistics Service (202) 447-5446.



Table 5.—Prices received by farmers, U.S. average

	Annual*			1986						1987
	1984	1985	1986 P	Jan	Aug	Sept	Oct	Nov R	Dec P	Jan P
<b>Crops</b>										
All wheat (\$/bu)	3.46	3.20	2.71	3.19	2.26	2.28	2.30	2.43	2.49	2.44
Rice, rough (\$/cwt)	8.32	7.85	5.04	7.90	3.82	3.82	3.90	3.93	3.76	3.72
Corn (\$/bu)	3.05	2.49	1.96	2.33	1.73	1.44	1.40	1.47	1.50	1.43
Sorghum (\$/cwt)	4.60	3.97	3.11	3.69	2.65	2.36	2.35	2.38	2.41	2.32
All hay, baled (\$/ton)	75.40	69.90	61.90	65.80	58.30	58.40	57.40	56.50	57.20	55.40
Soybeans (\$/bu)	7.02	5.42	5.00	5.16	4.98	4.86	4.55	4.64	4.67	4.69
Cotton, Upland (cts/lb)	65.6	56.1	54.7	54.0	47.2	47.4	47.1	52.9	54.7	49.2
Potatoes (\$/cwt)	5.69	3.92	4.94	3.12	6.25	4.50	4.27	4.64	4.73	4.76
Lettuce (\$/cwt) 1/	11.00	10.90	11.20	10.20	10.40	12.60	8.31	12.00	11.00	13.20
Tomatoes (\$/cwt)	25.60	24.10	25.40	34.20	20.20	20.80	30.00	36.30	19.00	30.40
Onions (\$/cwt)	11.70	9.75	9.80	7.70	9.70	9.25	10.40	12.70	12.00	15.40
Dry edible beans (\$/cwt)	18.70	17.60	18.80	17.30	16.90	15.40	20.60	20.00	22.70	20.70
Apples for fresh use (cts/lb)	15.5	17.3	NA	17.0	26.8	22.3	20.1	18.5	17.9	17.9
Pears for fresh use (\$/ton)	300.00	349.00	396.00	328.00	341.00	341.00	419.00	396.00	390.00	376.00
Oranges, all uses (\$/box) 2/	5.95	7.41	4.18	4.27	4.03	4.34	4.47	6.58	4.59	4.24
Grapefruit, all uses (\$/box) 2/	2.68	4.01	4.21	3.78	6.76	6.63	6.29	4.19	4.54	4.50
<b>Livestock</b>										
Beef cattle (\$/cwt)	57.60	54.00	52.80	53.20	54.40	54.60	54.40	54.60	53.20	54.70
Calves (\$/cwt)	60.20	62.40	60.90	60.10	61.10	63.40	62.70	62.20	62.20	65.10
Hogs (\$/cwt)	47.60	43.90	50.10	44.50	62.10	58.30	53.10	52.80	50.60	46.40
Lambs (\$/cwt)	60.30	68.10	69.10	63.90	69.50	67.60	62.50	69.30	73.20	77.70
All milk, sold to plants (\$/cwt)	13.50	12.70	12.50	12.50	12.20	12.70	13.10	13.40	13.40	13.30
Milk, manuf. grade (\$/cwt)	12.49	11.72	11.50	11.60	11.20	11.70	12.10	12.30	12.30	12.20
Broilers (cts/lb)	33.2	30.2	34.7	30.5	45.9	37.8	40.7	34.9	30.6	31.1
Eggs (cts/doz) 3/	70.3	57.4	60.3	65.1	62.6	62.8	58.1	66.3	65.2	59.3
Turkeys (cts/lb)	46.6	47.2	44.2	35.7	50.8	51.2	52.6	51.5	41.5	34.9
Wool (cts/lb) 4/	79.5	63.3	66.0	54.3	68.8	72.1	68.2	62.3	62.0	57.0

1/ Due to program modifications, 1983 data not comparable with 1984 and 1985. 2/ Equivalent on-tree returns. 3/ Average of all eggs sold by producers including hatching eggs and eggs sold at retail. 4/ Average local market price, excluding incentive payments. \*Calendar year averages, except for potatoes, dry edible beans, apples, oranges, and grapefruit, which are crop years. P = preliminary. R = revised. NA = not available

Information contact: National Agricultural Statistics Service (202) 447-5446.

## Producer and Consumer Prices

Table 6.—Consumer Price Index for all urban consumers, U.S. average (not seasonally adjusted)

	Annual	1985	1986							
	1986	Dec	May	June	July	Aug	Sept	Oct	Nov	Dec
						1967=100				
Consumer price index, all items	328.4	327.4	326.3	327.9	328.0	328.6	330.2	330.5	330.8	331.1
Consumer price index, less food	328.6	328.9	326.7	328.6	328.0	328.1	330.0	330.2	330.4	330.6
All food	319.7	313.2	317.0	317.1	320.1	322.7	323.2	323.7	324.6	325.2
Food away from home	360.1	352.1	358.8	360.2	360.8	361.8	363.3	364.0	365.8	367.1
Food at home	305.3	299.3	302.1	301.6	305.5	308.9	309.0	309.5	309.9	310.2
Meats 1/	273.9	270.1	262.1	264.4	272.9	279.8	283.6	283.9	285.4	286.3
Beef & veal	271.4	277.8	264.9	264.9	267.6	270.9	272.4	273.8	277.6	279.5
Pork	273.8	254.7	250.0	257.0	278.0	292.6	300.1	298.0	295.6	294.2
Poultry	232.7	220.3	218.7	223.7	240.3	255.0	249.5	247.8	245.2	241.9
Fish	443.2	420.3	437.1	434.5	447.3	446.3	447.2	451.6	449.7	457.6
Eggs	186.3	196.7	173.7	166.9	175.2	192.9	186.0	186.2	195.8	198.6
Dairy products 2/	258.4	256.9	257.1	257.2	258.4	258.3	258.5	260.0	261.2	262.2
Fats & oils 3/	287.8	290.3	287.2	287.0	287.3	287.8	285.6	284.6	285.4	286.0
Fresh fruit	369.3	335.8	385.5	372.4	382.2	391.5	384.1	375.1	360.6	355.8
Processed fruit 4/	163.3	167.0	163.5	161.4	161.8	162.3	161.9	162.0	162.0	163.5
Fresh vegetables	330.3	338.3	345.7	326.2	325.0	321.9	321.0	328.8	338.9	342.5
Potatoes	307.3	260.1	279.6	317.3	356.0	357.9	335.4	323.4	325.7	332.0
Processed vegetables 4/	147.4	147.1	147.4	148.0	148.4	148.5	146.9	146.2	146.5	147.4
Cereals & bakery products 4/	325.8	321.9	323.8	326.1	326.3	328.2	328.5	328.4	328.5	329.5
Sugar & sweets	411.1	402.2	411.2	411.5	412.4	413.1	413.7	413.4	412.4	411.8
Beverages, nonalcoholic	478.2	448.8	481.9	480.0	478.3	476.9	475.7	477.5	476.9	470.2
Apparel commodities less footwear	188.8	191.1	187.2	184.8	183.3	188.1	194.0	194.6	194.4	191.7
Footwear	211.2	213.1	211.5	210.0	209.1	209.6	212.0	215.1	215.1	214.0
Tobacco products	351.0	337.4	346.5	347.1	354.3	356.2	356.8	357.2	357.3	357.6
Beverages, alcoholic	239.7	236.2	239.4	240.1	240.4	240.1	240.4	240.6	240.5	240.8

1/ Beef, veal, lamb, pork, and processed meat. 2/ Includes butter. 3/ Excludes butter. 4/ December 1977=100.

Information contact: Raiph Parlett (202) 786-1870.

Table 7.—Producer price indexes, U.S. average (not seasonally adjusted)

	Annual			1985	1986					
	1984	1985	1986 P	Dec	July R	Aug R	Sept	Oct	Nov	Dec
	1967=100									
Finished goods 1/	291.1	293.7	289.6	297.2	287.6	288.1	287.5	290.5	290.7	289.9
Consumer foods	273.3	271.2	278.0	275.0	280.4	284.0	282.2	282.9	283.0	282.9
Fresh fruit	253.0	256.1	262.1	270.5	275.6	274.5	238.3	281.6	271.0	271.1
Fresh & dried vegetables	278.3	245.1	241.1	244.8	240.0	237.8	243.6	249.6	262.5	251.9
Dried fruit	386.6	363.5	377.4	375.1	377.4	381.5	383.7	383.8	387.3	384.8
Canned fruit & juice	312.4	323.1	315.1	314.1	315.2	317.4	311.9	310.9	314.8	320.5
Frozen fruit & juice	351.0	362.3	314.8	338.2	311.8	311.2	310.5	316.3	320.0	325.1
Fresh veg. excl. potatoes	219.1	205.9	204.0	220.4	191.7	184.8	202.4	204.3	214.1	206.1
Canned veg. and juices	252.6	246.9	245.1	240.0	245.0	244.3	248.9	243.2	245.3	246.8
Frozen vegetables	291.0	298.4	298.5	298.8	298.1	298.5	298.1	297.9	297.8	298.4
Potatoes	397.7	304.3	312.6	264.7	352.6	367.1	330.8	353.3	374.1	350.5
Eggs	210.8	171.0	177.9	200.0	167.3	191.4	181.1	173.5	197.4	194.0
Bakery products	299.1	313.7	321.3	319.5	322.0	322.9	323.4	323.0	322.5	321.1
Meats	236.8	227.9	235.2	237.1	242.2	252.9	251.4	246.4	244.0	243.6
Beef & veal	237.1	221.3	216.0	234.5	215.6	220.9	219.7	221.0	223.5	219.8
Pork	226.5	223.8	250.9	232.3	273.8	296.2	290.3	272.1	259.4	263.4
Processed poultry	206.0	197.3	207.8	204.1	228.0	245.8	220.4	232.9	213.3	200.5
Fish	476.0	484.2	530.4	527.9	510.8	522.7	534.8	533.6	544.1	569.4
Dairy products	251.7	249.4	248.8	246.2	247.7	249.6	250.6	251.8	253.5	254.4
Processed fruits & vegetables	294.3	296.3	287.9	288.2	286.9	288.5	289.0	287.0	289.4	292.0
Shortening & cooking oils	311.6	290.6	242.4	260.4	238.1	235.5	231.0	234.0	241.3	236.3
Consumer finished goods less foods	294.1	297.3	283.4	300.7	278.3	277.5	278.1	281.0	281.1	279.9
Beverages, alcoholic	209.8	213.0	217.8	216.1	218.1	218.8	216.6	218.7	218.0	218.3
Soft drinks	340.2	343.6	349.7	342.1	349.7	347.6	349.3	351.3	351.0	351.6
Apparel	201.3	204.1	206.5	205.1	207.0	206.5	206.7	207.0	207.4	206.7
Footwear	251.7	256.7	261.8	258.6	261.0	261.6	261.9	263.5	263.5	263.8
Tobacco products	398.4	428.1	460.4	435.5	469.2	469.2	469.2	469.3	469.3	469.3
Intermediate materials 2/	320.0	318.7	307.6	318.9	304.8	304.5	306.1	304.9	304.9	305.0
Materials for food manufacturing	271.1	258.8	250.9	254.3	251.7	255.5	254.3	253.2	253.2	253.0
Flour	185.2	183.0	173.4	183.8	167.0	165.4	162.4	164.6	164.4	164.5
Refined sugar 3/	173.5	165.6	166.4	163.0	165.0	166.6	167.8	168.3	168.6	169.1
Crude vegetable oils	262.2	219.6	135.8	164.9	132.4	123.0	123.6	121.3	124.2	122.8
Crude materials 4/	330.8	306.1	280.0	304.3	277.7	276.3	275.5	276.7	278.4	274.8
Foodstuffs & feedstuffs	259.5	235.0	230.6	236.8	234.4	238.1	231.9	233.7	235.9	232.8
Fruits & vegetables 5/	278.1	260.5	261.2	267.2	266.8	265.0	251.6	275.1	277.7	271.6
Grains	239.7	202.8	167.2	195.6	152.3	138.9	132.6	134.9	146.3	149.7
Livestock	251.8	229.9	236.1	239.3	245.3	253.0	250.9	245.1	247.1	244.5
Poultry, live	240.6	226.2	248.8	235.2	296.7	340.0	279.5	314.0	250.9	219.7
Fibers, plant & animal	228.4	197.8	179.3	186.6	220.6	94.3	107.9	150.8	154.0	176.7
Fluid milk	278.3	264.6	256.9	255.2	251.3	256.2	258.6	266.6	270.4	271.4
Oilseeds	253.3	202.7	196.2	193.2	198.2	187.7	187.2	183.6	208.9	196.3
Tobacco, leaf	274.6	274.1	243.0	257.2	248.4	225.5	239.6	229.1	230.8	230.8
Sugar, raw cane	312.0	291.3	292.2	272.6	293.7	292.9	293.2	297.0	299.0	294.4
All commodities	310.3	308.7	299.8	310.2	297.4	297.2	297.7	298.3	298.7	298.1
Industrial commodities	322.6	323.8	312.1	325.1	308.5	307.9	308.8	309.3	309.8	309.3
All foods 6/	269.2	264.6	268.4	267.2	270.5	274.4	272.2	273.0	273.2	273.1
Farm products &										
processed foods & feeds	262.4	250.5	252.0	252.6	254.3	255.5	254.6	255.4	255.2	254.6
Farm products	255.8	230.5	224.7	232.2	228.6	227.0	221.7	225.4	229.3	226.8
Processed foods & feeds 6/	265.0	260.4	265.1	262.8	266.8	269.6	269.0	268.2	267.9	268.4
Cereal & bakery products	270.5	279.9	281.9	283.1	281.0	281.4	280.8	280.7	280.4	280.6
Sugar & confectionery	301.2	291.0	295.7	285.9	296.0	296.0	297.9	298.7	299.6	299.7
Beverages	273.1	276.6	294.3	279.9	296.6	292.9	292.0	293.1	292.5	292.8

1/ Commodities ready for sale to ultimate consumer. 2/ Commodities requiring further processing to become finished goods. 3/ All types and sizes of refined sugar. (Dec. 1977=100). 4/ Products entering market for the first time which have not been manufactured at that point. 5/ Fresh and dried. 6/ Includes all raw, intermediate, and processed foods (excludes soft drinks, alcoholic beverages, and manufactured animal feeds). (1977=100). R = revised. P = preliminary.

Information contact: Bureau of Labor Statistics (202) 523-1913.



# Farm-Retail Price Spreads

Table 8.—Farm-retail price spreads

	Annual				1985						1986			
	1983	1984	1985	1986	Dec	July	Aug	Sept	Oct	Nov	Dec			
<b>Market basket 1/</b>														
Retail cost (1967=100)	268.7	279.3	282.6	288.7	285.4	288.9	292.9	293.1	293.3	293.9	294.8			
Farm value (1967=100)	242.3	255.4	237.2	234.1	242.0	239.2	247.3	245.9	244.7	245.9	240.2			
Farm-retail spread (1967=100)	284.3	293.3	309.3	320.8	310.9	318.0	319.7	320.8	321.9	322.0	322.0			
Farm value/retail cost (%)	33.4	33.9	31.1	30.0	31.4	30.7	31.3	31.1	30.9	30.8	30.2			
<b>Meat products</b>														
Retail cost (1967=100)	267.2	268.1	265.5	273.9	270.1	272.9	279.8	283.6	283.9	285.4	286.3			
Farm value (1967=100)	235.8	241.5	221.0	229.1	233.5	237.4	249.0	252.0	250.4	240.6	240.0			
Farm-retail spread (1967=100)	304.0	299.1	316.6	326.2	312.9	314.5	315.8	319.7	334.2	337.8	340.5			
Farm value/retail cost (%)	47.6	48.6	45.1	45.1	46.6	46.9	48.0	48.1	45.8	45.5	45.2			
<b>Dairy products</b>														
Retail cost (1967=100)	250.0	253.2	258.0	258.4	256.9	258.4	258.3	258.5	260.0	261.2	262.2			
Farm value (1967=100)	262.1	258.8	248.2	241.5	238.0	238.6	239.7	243.9	250.4	251.9	254.3			
Farm-retail spread (1967=100)	239.3	248.3	266.5	273.3	273.5	275.8	274.6	271.4	268.5	269.3	269.1			
Farm value/retail cost (%)	49.0	47.8	45.0	43.7	43.3	43.2	43.4	44.1	45.0	45.1	45.4			
<b>Poultry</b>														
Retail cost (1967=100)	197.5	218.5	216.4	232.7	220.3	240.3	255.0	249.5	247.8	245.2	241.9			
Farm value (1967=100)	213.0	249.9	234.9	255.4	251.8	305.1	326.4	282.2	300.4	266.6	228.4			
Farm-retail spread (1967=100)	182.4	188.1	198.4	210.9	189.8	177.6	185.9	217.8	196.9	224.5	255.0			
Farm value/retail cost (%)	53.1	56.3	53.4	54.0	56.2	62.4	63.0	55.6	59.6	53.5	46.4			
<b>Eggs</b>														
Retail cost (1967=100)	187.1	209.0	174.3	186.3	196.7	175.2	192.9	186.0	186.2	195.8	198.6			
Farm value (1967=100)	206.1	230.3	178.9	192.7	215.7	184.4	199.0	198.3	179.9	214.3	208.8			
Farm-retail spread (1967=100)	159.5	178.2	167.6	177.1	169.1	161.9	184.1	168.3	195.3	169.0	183.9			
Farm value/retail cost (%)	65.1	65.1	60.7	61.1	64.8	62.2	61.0	63.0	57.1	64.7	62.1			
<b>Cereal &amp; bakery products</b>														
Retail cost (1967=100)	292.5	305.3	317.0	325.8	321.8	326.3	328.2	328.5	328.4	328.5	329.5			
Farm value (1967=100)	186.6	192.0	175.9	142.3	169.0	132.2	123.9	121.7	124.8	125.7	126.1			
Farm-retail spread (1967=100)	314.0	328.7	346.2	363.7	353.6	366.5	370.5	371.3	370.5	370.5	371.6			
Farm value/retail cost (%)	11.1	10.8	9.5	7.5	9.0	7.0	6.5	6.4	6.5	6.6	6.6			
<b>Fresh fruits</b>														
Retail cost (1967=100)	303.6	345.3	383.5	390.1	398.4	406.9	418.2	407.7	398.2	381.6	379.8			
Farm value (1967=100)	220.6	315.1	302.7	285.3	317.2	290.8	290.9	291.4	303.1	305.6	311.1			
Farm-retail spread (1967=100)	340.8	358.9	419.8	437.1	376.9	459.0	475.3	459.9	440.9	415.7	410.6			
Farm value/retail cost (%)	22.5	28.3	24.4	22.7	27.4	22.1	21.5	22.1	23.6	24.8	25.4			
<b>Fresh vegetables</b>														
Retail cost (1967=100)	299.3	331.8	317.5	330.3	338.3	325.0	321.9	321.0	328.8	338.9	342.5			
Farm value (1967=100)	267.4	298.7	256.7	247.8	286.3	228.7	263.8	267.0	273.3	299.4	246.9			
Farm-retail spread (1967=100)	314.3	347.4	346.1	369.2	362.7	370.3	349.2	346.4	354.9	357.5	387.4			
Farm value/retail cost (%)	28.6	28.8	25.9	24.0	27.1	22.5	26.2	26.0	26.6	28.2	27.0			
<b>Processed fruits &amp; vegetables</b>														
Retail cost (1967=100)	288.8	306.1	314.1	309.1	312.3	308.6	309.2	307.3	306.6	306.9	308.8			
Farm value (1967=100)	300.5	343.5	378.5	326.3	358.5	322.7	317.5	315.3	332.5	332.1	339.8			
Farm-retail spread (1967=100)	286.2	297.8	299.9	305.3	302.1	305.9	307.4	305.5	300.9	301.3	301.9			
Farm value/retail cost (%)	18.9	20.3	21.8	19.1	20.8	19.0	18.6	18.6	19.7	19.6	19.9			
<b>Fats &amp; oils</b>														
Retail cost (1967=100)	263.1	288.0	294.4	287.8	290.3	287.3	287.8	285.6	284.6	285.4	286.0			
Farm value (1967=100)	251.0	324.8	271.3	199.1	237.5	196.8	187.0	178.7	186.2	181.5	183.4			
Farm-retail spread (1967=100)	267.8	273.8	303.3	321.9	310.6	322.1	326.6	326.7	322.5	325.3	325.5			
Farm value/retail cost (%)	26.5	31.3	25.6	19.4	22.7	19.0	18.1	17.4	18.2	17.7	17.8			
	Annual				1985						1986			
	1983	1984	1985	1986	Dec	July	Aug	Sept	Oct	Nov	Dec			
<b>Beef, Choice</b>														
Retail price 2/ (cts/lb)	238.1	239.6	232.6	230.7	236.9	227.4	230.2	231.0	231.2	233.8	234.8			
Net carcass value 3/ (cts)	149.4	147.6	135.2	133.1	147.7	133.4	135.6	135.8	137.1	141.7	136.3			
Net farm value 4/ (cts)	136.2	140.0	126.8	124.4	137.4	124.9	128.2	129.0	128.9	134.1	128.3			
Farm-retail spread (cts)	101.9	99.6	105.8	106.3	99.5	102.5	102.0	102.0	102.3	99.7	106.5			
Carcass-retail spread 5/ (cts)	92.7	92.0	97.4	97.6	89.2	94.0	94.6	95.2	94.1	92.1	98.5			
Farm-carcass spread 6/ (cts)	9.2	7.6	8.4	8.7	10.3	8.5	7.4	6.8	8.2	7.6	8.0			
Farm value/retail price (%)	57	58	55	54	58	55	56	56	56	57	55			
<b>Pork</b>														
Retail price 2/ (cts/lb)	169.8	162.0	162.0	178.4	166.5	183.4	190.3	194.4	194.9	192.5	191.3			
Wholesale value 3/ (cts)	108.9	110.1	101.1	110.9	103.5	127.4	131.9	127.3	118.5	118.4	113.5			
Net farm value 4/ (cts)	76.5	77.4	71.4	82.4	75.3	97.9	102.0	95.7	86.7	86.1	81.4			
Farm-retail spread (cts)	93.3	84.6	90.6	96.0	91.2	85.5	88.3	98.7	108.2	106.4	109.9			
Wholesale-retail spread 5/ (cts)	60.9	51.9	60.9	67.5	63.0	56.0	58.4	67.1	76.4	74.1	77.8			
Farm-wholesale spread 6/ (cts)	32.4	32.7	29.7	28.5	28.2	29.5	29.9	31.6	31.8	32.3	32.1			
Farm value/retail price (%)	45	48	44	46	45	53	54	49	44	45	43			

1/ Retail costs are based on indexes of retail prices for domestically produced farm foods from the CPI-U published monthly by the Bureau of Labor Statistics. The farm value is the payment to farmers for quantity of farm product equivalent to retail unit, less allowance for byproduct. Farm values are based on prices at first point of sale and may include marketing charges such as grading and packing for some commodities. The farm-retail spread, the difference between the retail price and the farm value, represents charges for assembling, processing, transporting, and distributing these foods. 2/ Estimated weighted average price of retail cuts from pork and choice yield grade 3 beef carcasses. Retail cut prices from BLS. 3/ Value of carcass quantity (beef) and wholesale cuts (pork) equivalent to 1 lb. of retail cuts; beef adjusted for value of fat and bone byproducts. 4/ Market value to producer for quantity of live animal equivalent to 1 lb. of retail cuts minus value of byproducts. 5/ Represents charges for retailing and other marketing services such as fabricating, wholesaling, and in-city transportation. 6/ Represents charges made for livestock marketing, processing, and transportation to city where consumed.

Note: Annual historical data on farm-retail price spreads may be found in Food Consumption, Prices and Expenditures, Statistical Bulletin 736, ERS, USDA.

Information contacts: Denis Dunham (202) 786-1870; Ron Gustafson (202) 786-1830.

Table 9.—Price Indexes of food marketing costs

	Annual			1985		1986			
	1984	1985	1986 P	III	IV	I	II	III P	IV P
	1967=100								
Labor-hourly earnings and benefits	365.5	364.7	360.2	362.5	364.1	363.6	361.3	356.0	360.0
Processing	350.2	357.3	365.4	355.3	360.7	363.6	369.6	362.3	366.3
Wholesaling	371.1	382.7	374.5	385.3	385.3	380.0	370.7	371.5	376.0
Retailing	378.3	364.1	348.7	359.5	358.2	356.4	349.0	342.7	346.6
Packaging & containers	307.6	308.1	306.3	305.7	296.9	302.9	304.7	307.1	310.0
Paperboard boxes & containers	281.1	275.2	272.3	269.7	265.6	265.8	268.4	274.6	280.4
Metal cans	397.3	416.9	430.1	414.6	419.8	429.9	430.2	430.2	430.2
Paper bags & related products	280.9	288.1	289.3	286.4	285.9	286.1	287.8	289.9	293.5
Plastic films & bottles	272.1	251.6	224.5	272.1	205.7	224.7	224.7	224.5	224.3
Glass containers	360.8	380.0	398.0	386.9	387.0	391.1	398.1	401.3	401.5
Metal foil	226.9	213.8	209.3	211.3	209.0	208.9	208.9	209.1	210.3
Transportation services	390.9	393.9	391.7	393.9	393.9	393.9	393.9	392.2	386.7
Advertising	300.5	320.2	339.7	322.6	324.4	333.3	338.4	341.6	345.6
Fuel & power	712.5	700.0	590.2	688.5	711.4	642.5	586.0	570.3	562.7
Electric	440.0	453.5	457.9	462.6	453.5	458.2	457.5	466.9	449.0
Petroleum	880.4	821.5	499.8	766.4	878.0	660.3	477.9	414.8	446.2
Natural gas	1,162.9	1,158.2	1,096.9	1,170.8	1,124.2	1,107.4	1,111.8	1,106.1	1,062.1
Communications, water & sewage	215.5	224.9	236.1	228.0	229.3	231.4	235.9	238.8	238.3
Rent	261.6	268.3	275.6	270.2	270.7	273.6	275.3	276.1	276.7
Maintenance & repair	350.3	360.3	368.5	360.7	364.1	367.2	364.2	369.1	373.5
Business services	306.1	321.9	334.1	323.7	327.3	330.4	333.3	335.5	336.0
Supplies	288.5	287.9	282.7	288.2	287.3	287.4	282.3	280.7	280.6
Property taxes & insurance	343.7	362.0	382.3	365.5	370.7	375.3	380.7	384.2	389.0
Interest, short-term	198.8	157.2	125.1	150.7	150.7	145.1	128.0	115.3	112.1
Total marketing cost index	357.0	358.8	353.4	357.2	358.6	356.5	353.4	351.0	352.8

\* Indexes measure changes in employee earnings and benefits and in prices of supplies and services used in processing, wholesaling, and retailing U.S. farm foods purchased for at-home consumption. P = preliminary.

Note: Annual historical data on food marketing cost indexes may be found in Food Consumption, Prices, and Expenditures, Statistical Bulletin 713, ERS, USDA.

Information contact: Denis Dunham (202) 786-1870.



Table 10.—U.S. meat supply and use

Item	Beg. stks	Pro-duc-tion 1/	Im-ports	Total supply	Ex-ports	Ship-ments	Mili-tary con-sump-tion	Ending stocks	Civilian consumption		Primary market price 3/
									Total	Per capita 2/	
Pounds											
Beef:											
1984	325	23,598	1,823	25,746	329	47	112	358	24,900	78.5	65.34
1985	358	23,728	2,071	26,157	328	51	115	317	25,346	79.1	58.37
1986	317	24,387	2,101	26,805	507	54	122	310	25,812	79.8	57.75
1987 F	310	22,696	2,150	25,156	525	60	110	325	24,136	73.9	61-67
Pork:											
1984	301	14,812	954	16,067	164	147	86	274	15,396	61.8	48.86
1985	274	14,807	1,128	16,209	128	131	70	229	15,651	62.1	44.77
1986	229	14,062	1,107	15,398	85	133	77	197	14,906	58.5	51.19
1987 F	197	14,255	1,100	15,552	100	140	80	225	15,007	58.4	47-53
Veal:											
1984	9	495	24	528	6	1	4	14	503	1.8	60.24
1985	14	515	20	549	4	1	7	11	526	1.8	62.42
1986	11	526	27	564	5	1	7	7	544	1.9	60.90
1987 F	7	451	25	483	4	1	7	7	464	1.6	63-69
Lamb and mutton:											
1984	11	379	20	410	2	3	0	7	398	1.5	62.18
1985	7	358	36	401	1	2	0	13	385	1.4	68.61
1986	13	334	39	386	1	1	0	13	371	1.4	69.46
1987 F	13	326	40	379	2	1	0	8	368	1.4	69-75
Total red meat:											
1984	646	39,284	2,821	42,751	501	198	202	653	41,197	143.6	NA
1985	653	39,408	3,255	43,316	461	185	192	570	41,908	144.5	NA
1986	570	39,309	3,274	43,153	598	189	206	527	41,633	141.6	NA
1987 F	527	37,728	3,315	41,570	631	202	197	565	39,975	135.3	NA
Broilers:											
1984	21	13,016	0	13,038	407	145	34	20	12,432	52.9	55.6
1985	20	13,762	0	13,781	417	143	34	27	13,161	55.5	50.8
1986	27	14,442	0	14,469	554	147	36	24	13,710	57.3	56.9
1987 F	24	15,284	0	15,308	700	140	36	25	14,407	59.6	50-56
Mature chickens:											
1984	92	672	0	764	26	2	2	119	615	2.6	NA
1985	119	636	0	755	21	1	2	144	587	2.5	NA
1986	144	670	0	814	16	3	2	167	626	2.6	NA
1987 F	167	640	0	807	20	4	1	130	652	2.7	NA
Turkeys:											
1984	162	2,685	0	2,847	27	7	13	125	2,676	11.4	74.4
1985	125	2,942	0	3,067	27	7	13	150	2,870	12.1	75.5
1986	150	3,302	0	3,452	25	3	10	178	3,234	13.5	72.2
1987 F	178	3,783	0	3,961	25	4	16	150	3,766	15.6	62-68
Total poultry:											
1984	275	16,373	0	16,648	460	153	49	264	15,722	66.9	NA
1985	264	17,339	0	17,604	465	151	49	321	16,618	70.1	NA
1986	321	18,414	0	18,734	595	153	47	369	17,570	73.4	NA
1987 F	369	19,706	0	20,076	745	148	53	305	18,825	77.9	NA
Red meat & poultry:											
1984	921	55,657	2,821	59,399	961	351	251	917	56,919	210.5	NA
1985	917	56,747	3,255	60,920	926	336	241	891	58,526	214.6	NA
1986	891	57,723	3,274	61,887	1,194	342	253	896	59,203	215.0	NA
1987 F	896	57,434	3,315	61,646	1,376	350	250	870	58,800	213.2	NA

1/ Total including farm production for red meats and federally inspected plus non-federally inspected for poultry. 2/ Retail weight basis. 3/ Dollars per cwt for red meat; cents per pound for poultry. Beef: choice steers, Omaha 900-1,100 lbs.; pork: barrows and gilts, 7 markets; veal: farm price of calves; lamb and mutton: choice slaughter lambs, San Angelo; broilers: wholesale 12-city average; turkeys: wholesale NY 8-16 lb. young hens. 4/ Carcass weight for red meats and certified ready-to-cook for poultry. NA = not available. F = forecast.

Information contact: Ron Gustafson (202) 786-1830.

Table 11.—U.S. egg supply and use

	Beg. stocks	Pro-duction	Im-ports	Total supply	Ex-ports	Ship-ments	Mili-tary use	Hatch-ing use	Ending stocks	Civilian consumption		Wholesale price <sup>a</sup>
										Total	Per capita	
											No	
Million dozen												
												Cts/doz
982	17.5	5,801.9	2.5	5,821.8	158.2	26.7	22.4	505.6	20.3	5,088.6	265.1	70.1
983	20.3	5,659.2	23.4	5,703.0	85.8	26.6	25.1	500.0	9.3	5,056.2	260.8	75.2
984	9.3	5,708.2	32.0	5,749.5	58.2	27.8	17.6	529.7	11.1	5,105.1	260.9	80.9
985	11.1	5,688.4	12.7	5,712.2	70.6	30.3	20.2	548.1	10.7	5,032.2	254.7	66.4
986 E	10.7	5,715.8	13.6	5,740.2	101.0	25.7	17.5	564.3	10.5	5,021.3	251.8	71.1
987 F	10.5	5,765.0	12.0	5,787.5	100.0	24.0	20.0	600.0	10.0	5,033.5	250.1	64-70

\* Cartoned Grade A large eggs in New York. E = estimated. F = forecast.

Information contact: Allen Baker (202) 786-1830.

Table 12.—U.S. milk supply and use<sup>1</sup>

Calendar year	Pro- duc- tion	Farm use	Commercial		Im- ports	Total commer- cial supply	CCC net re- movals	Commercial		All milk price 2/
			Farm market- ings	Beg. stocks				Ending stocks	Disap- pearance	
Billion pounds										\$/cwt
1980	128.4	2.4	126.1	5.4	2.1	133.6	8.8	5.8	119.0	13.05
1981	132.8	2.3	130.5	5.8	2.3	138.5	12.9	5.4	120.3	13.77
1982	135.5	2.4	133.1	5.4	2.5	141.0	14.3	4.6	122.1	13.61
1983	139.7	2.4	137.3	4.6	2.6	144.5	16.8	5.2	122.5	13.58
1984	135.4	2.9	132.5	5.2	2.7	140.5	8.6	4.9	126.9	13.46
1985	143.7	2.5	141.2	4.9	2.8	148.9	13.2	4.6	131.1	12.75
1986 P	144.9	2.3	142.6	4.6	2.7	149.9	10.6	4.2	135.0	12.48
1987 F	142.0	2.3	139.7	4.2	2.7	146.6	5.4	4.2	137.0	12.40

1/ Milkfat basis. Totals may not add because of rounding. 2/ Delivered to plants and dealers; does not reflect deductions. P = preliminary. F = forecast.

Information contact: Jim Miller (202) 786-1830.

## Livestock and Products

Table 13.—Poultry and eggs

	Annual			1985		1986				
	1984	1985	1986	Dec	July	Aug	Sept	Oct	Nov	Dec
<b>Broilers</b>										
Federally inspected slaughter, certified (mil lb)	12,998.6	13,569.2	14,224.6	1,094.1	1,197.5	1,181.0	1,241.6	1,255.7	1,050.4	1,211.2
Wholesale price, 12-city, (cts/lb)	55.6	50.8	56.97	48.7	69.1	69.7	61.0	62.5	57.5	50.0
Price of grower feed (\$/ton)	233	197	NA	186	190	NA	NA	177	NA	NA
Broiler-feed price ratio 1/	2.8	3.1	NA	3.2	4.5	NA	NA	4.6	NA	NA
Stocks beginning of period (mil lb)	21.2	19.7	26.6	27.6	23.3	24.0	24.3	26.0	25.5	22.5
Broiler-type chicks hatched (mil) 2/	4,593.9	4,803.8	5,008.0	416.5	429.8	415.8	401.6	415.4	402.7	437.1
<b>Turkeys</b>										
Federally inspected slaughter, certified (mil lb)	2,574	2,800	3,130	210.7	307.6	299.5	332.4	364.8	307.1	245.6
Wholesale price, New York, 8-16 lb. young hens (cts/lb)	74.4	75.5	71.9	86.9	77.8	80.5	81.2	83.2	80.7	68.2
Price of turkey grower feed (\$/ton)	245	212	NA	213	221	NA	NA	215	NA	NA
Turkey-feed price ratio 1/	3.8	4.4	NA	5.5	4.5	NA	NA	4.9	NA	NA
Stocks beginning of period (mil lb)	161.8	125.3	150.2	208.2	294.0	388.1	449.3	511.6	543.3	249.6
Poults placed in U.S. (mil)	190.0	197.8	225.4	14.4	22.3	16.4	13.6	14.2	13.8	17.7
<b>Eggs</b>										
Farm production (mil)	68,498	68,261	68,590	5,894	5,699	5,713	5,548	5,797	5,729	5,970
Average number of layers (mil) 3/	278	277	278	234	226	227	229	231	233	235
Rate of lay (eggs per layer on farms) 3/	245	247	247	21.1	20.9	20.9	20.3	20.9	20.5	21.3
Cartoned price, New York, grade A large (cts/doz) 4/	80.9	66.4	71.1	76.1	73.0	72.8	72.6	69.6	77.2	75.5
Price of laying feed (\$/ton)	206	182	NA	179	172	NA	NA	166	NA	NA
Egg-feed price ratio 1/	6.8	6.3	NA	7.4	6.8	NA	NA	7.0	NA	NA
<b>Stocks, first of month</b>										
Shell (mil doz)	.39	.93	.72	.84	1.14	.75	.99	.87	.66	.87
Frozen (mil doz)	8.9	10.2	10.0	10.5	10.7	11.5	11.4	10.6	10.6	9.9
Replacement chicks hatched (mil)	459	407	425	34.6	33.5	33.4	32.5	32.5	27.8	33.2

1/ Pounds of feed equal in value to 1 dozen eggs or 1 lb. of broiler or turkey liveweight. 2/ Placement of broiler chicks are currently reported for 12 states only; henceforth, hatch of broiler-type chicks will be used as a substitute. 3/ Monthly data only available for 20 states. 4/ Price of cartoned eggs to volume buyers for delivery to retailers. NA = not available.

Information contact: Allen Baker (202) 786-1830.



Table 14.—Dairy

	Annual			1985	1986					
	1984	1985	1986	Dec	July	Aug	Sept	Oct	Nov	Dec
Milk prices, Minnesota-Wisconsin, 3.5% fat (\$/cwt) 1/	12.29	11.48	11.30	11.18	11.06	11.33	11.55	11.69	11.91	11.88
Wholesale prices										
Butter, Grade A Chl. (cts/lb)	148.8	141.1	144.5	139.1	143.7	153.9	154.2	153.5	151.9	145.5
Am. cheese, Wls. assembly pt. (cts/lb)	138.0	127.7	127.3	123.9	126.7	129.5	129.7	130.2	133.4	130.4
Nonfat dry milk, (cts/lb) 2/	90.9	84.0	80.6	80.4	80.4	80.6	80.6	81.2	82.0	81.4
USDA net removals										
Total milk equiv. (mil lb) 3/	8,637.0	13,174.1	10,628.1	833.5	585.0	111.0	172.2	90.1	7.7	390.1
Butter (mil lb)	202.3	334.2	287.6	21.5	3.3	-4.5	-5	-1	-1.6	9.6
Am. cheese (mil lb)	447.3	629.0	468.4	39.1	51.8	20.2	17.9	8.7	3.0	19.0
Nonfat dry milk (mil lb)	678.4	940.6	827.3	75.1	80.5	46.6	41.0	22.3	24.3	46.8
Milk										
Milk prod. 21 states (mil lb)	114,545	121,568	122,911	10,124	10,547	10,245	9,772	9,839	9,449	9,774
Milk per cow (lb)	12,691	13,204	13,505	1,083	1,166	1,138	1,090	1,099	1,058	1,099
Number of milk cows (thou)	9,026	9,207	9,101	9,347	9,047	8,999	8,966	8,953	8,927	8,897
U.S. milk production (mil lb)	135,450	143,667	144,892	11,968	5/12,409	5/12,028	5/11,481	5/11,571	5/11,135	5/11,519
Stock, beginning 4/										
Total (mil lb)	22,646	16,429	13,695	13,955	17,811	17,974	17,126	15,978	15,089	14,097
Commercial (mil lb)	5,234	4,937	4,590	4,705	5,278	5,284	5,304	5,070	4,823	4,342
Government (mil lb)	17,412	11,767	9,104	9,250	12,533	12,690	11,822	10,907	10,266	9,755
Imports, total (mil lb) 3/	2,741	2,777	NA	299	214	212	214	273	277	NA
Commercial disappearance milk equiv. (mil lb)	126,912	131,150	NA	11,352	11,835	11,912	11,567	11,804	11,695	NA
Butter										
Production (mil lb)	1,103.3	1,247.8	1,207.6	115.4	81.5	72.3	79.2	84.6	84.0	100.9
Stocks, beginning (mil lb)	499.4	296.5	205.5	206.9	342.8	337.6	304.4	279.6	253.3	223.5
Commercial disappearance (mil lb)	902.7	918.2	NA	94.5	81.6	75.2	80.8	83.3	95.1	NA
American cheese										
Production (mil lb)	2,648.5	2,854.4	2,834.3	236.6	244.1	224.0	201.7	207.1	195.5	222.9
Stocks, beginning (mil lb)	1,161.5	960.5	850.2	866.6	921.0	935.7	923.0	862.4	819.3	770.8
Commercial disappearance (mil lb)	2,253.6	2,278.3	NA	206.4	191.1	209.7	205.3	219.0	216.9	NA
Other cheese										
Production (mil lb)	2,025.5	2,170.5	2,391.5	200.9	195.2	200.9	213.1	218.3	202.1	212.9
Stocks, beginning (mil lb)	104.9	101.4	94.1	95.0	98.0	100.5	100.2	99.1	93.8	91.5
Commercial disappearance (mil lb)	2,310.9	2,460.5	NA	233.1	215.4	221.3	238.0	251.8	236.1	NA
Nonfat dry milk										
Production (mil lb)	1,160.7	1,390.0	1,297.8	115.8	115.1	95.9	75.2	68.7	68.2	90.4
Stocks, beginning (mil lb)	1,405.2	1,247.6	1,247.6	1,279.0	1,011.8	997.2	934.4	844.9	793.4	742.6
Commercial disappearance (mil lb)	497.8	435.0	NA	31.3	52.8	51.4	47.3	58.6	40.2	NA
Frozen dessert production (mil gal) 4/	1,241.8	1,249.4	1,273.6	77.8	135.5	126.6	107.0	99.1	81.4	81.7

1/ Manufacturing grade milk. 2/ Prices paid f.o.b. Central States production area, high heat spray process.  
3/ Milk-equivalent, fat-basis. 4/ Ice cream, ice milk, and hard sherbet. 5/ Estimated. NA = not available.

Information contact: Jim Miller (202) 786-1830.

Table 15.—Wool

	Annual			1985	1986					
	1984	1985	1986	Dec	July	Aug	Sept	Oct	Nov	Dec
U.S. wool price, Boston 1/ (cts/lb)	229	192	191	193	193	190	190	190	190	193
Imported wool price, Boston 2/ (cts/lb)	241	197	201	247	NA	187	184	190	199	208
U.S. mill consumption, scoured										
Apparel wool (thou lb)	128,982	106,051	134,989	8,870	12,288	9,919	9,956	11,820	9,947	10,788
Carpet wool (thou lb)	13,088	10,562	10,500	686	866	1,032	982	1,035	780	660

1/ Wool price delivered at U.S. mills, clean basis, Graded Territory 64's (20.60-22.04 microns) staple 2-3/4" and up. 2/ Wool price delivered at U.S. mills, clean basis, Australian 60/62's, type 64A (24 micron). Duty since 1982 has been 10.0 cents. NA = not available.

Information contact: John Lawler (202) 786-1840.

Table 16.—Meat animals

	Annual			1985	1986					
	1983	1984	1985	Dec	July	Aug	Sept	Oct	Nov	Dec
<b>Cattle on feed (7-States)</b>										
Number on feed (thou head) 1/	8,316	8,006	8,635	7,892	6,543	6,331	6,404	6,811	7,546	7,826
Placed on feed (thou head)	19,744	20,772	19,346	1,540	1,544	1,802	2,103	2,403	1,814	1,405
Marketings (thou head)	18,701	18,785	18,989	1,401	1,692	1,659	1,637	1,587	1,447	1,494
Other disappearance (thou head)	1,354	1,376	1,132	111	64	70	59	81	87	104
Beef steer-corn price ratio,										
Omaha 2/	20.6	21.6	23.3	26.7	29.0	36.6	42.4	42.5	40.3	38.9
Hog-corn price ratio, Omaha 2/	15.9	16.1	17.8	19.8	30.3	39.3	42.9	39.0	35.6	33.4
<b>Market prices (\$ per cwt)</b>										
<b>Slaughter cattle:</b>										
Choice steers, Omaha	62.37	65.34	58.37	62.94	58.27	59.04	59.43	59.73	61.54	59.82
Utility cows, Omaha	39.35	39.81	38.32	33.88	38.32	37.62	38.42	37.32	35.88	35.48
Choice vealers, S. St. Paul	72.97	63.95	58.28	45.94	62.13	62.50	67.50	67.50	67.50	67.50
<b>Feeder cattle:</b>										
Choice, Kansas City, 600-700 lb.	63.70	65.28	64.56	60.98	61.00	65.75	65.50	65.10	64.13	65.00
<b>Slaughter hogs:</b>										
Barrows & gilts, 7-markets	47.71	48.86	44.77	46.91	60.99	63.39	59.01	54.21	53.62	51.42
<b>Feeder pigs:</b>										
S. Mo. 40-50 lb. (per head)	34.03	39.12	37.20	28.65	50.76	56.64	59.63	53.23	50.00	47.69
<b>Slaughter sheep &amp; lambs:</b>										
Lambs, Choice, San Angelo	57.40	62.18	68.61	59.33	73.84	68.12	66.38	59.65	65.42	73.33
Ewes, Good, San Angelo	16.85	20.90	34.02	36.67	35.31	34.88	29.38	36.85	37.58	38.00
<b>Feeder lambs:</b>										
Choice, San Angelo	54.87	61.02	85.91	84.67	79.97	80.00	83.88	81.45	83.50	89.92
<b>Wholesale meat prices, Midwest</b>										
Choice steer beef, 600-700 lb.	97.83	98.01	90.76	98.94	89.25	90.98	90.50	91.80	95.70	92.04
Canner & Cutter cow beef	78.48	74.70	74.13	68.37	73.33	71.50	72.60	71.44	68.92	69.58
Pork loins, 8-14 lb. 3/	—	96.36	91.51	100.34	121.77	125.73	118.84	109.81	100.13	100.30
Pork bellies, 12-14 lb.	60.58	60.08	59.50	58.63	90.08	89.10	75.64	60.32	63.30	64.72
Hams, skinned, 14-17 lb.	75.60	78.22	67.50	66.67	85.57	92.16	98.98	105.20	109.40	87.43
<b>Commercial slaughter (thou head)*:</b>										
<b>Cattle</b>	36,649	37,582	36,293	2,925	3,322	3,203	3,128	3,285	2,819	3,076
Steers	17,486	17,474	16,912	1,294	1,555	1,497	1,499	1,586	1,291	1,399
Heifers	10,758	10,691	11,237	830	1,004	1,009	957	931	792	875
Cows	7,597	8,617	7,387	744	698	635	608	463	679	746
Bulls & stags	808	789	758	58	65	62	64	65	57	56
Calves	3,076	3,297	3,385	316	300	278	281	295	255	289
Sheep & lambs	6,619	6,759	6,165	504	448	443	511	511	413	454
<b>Hogs</b>	87,584	85,168	84,492	6,900	6,098	5,972	6,502	7,240	6,239	6,792
<b>Commercial production (mli lb)</b>										
Beef	23,060	23,418	23,557	1,855	2,148	2,077	2,050	2,146	1,808	1,971
Veal	428	479	499	46	45	44	43	44	37	41
Lamb & mutton	367	371	352	30	25	25	30	30	24	27
Pork	15,117	14,720	14,728	1,215	1,063	1,037	1,137	1,279	1,115	1,220
	Annual			1985	1986					
	1984	1985	1986	III	IV	I	II	III	IV	I
<b>Cattle on feed (13-States)</b>										
Number on feed (thou head) 1/	9,908	10,653	9,754	8,670	7,937	9,754	8,945	7,970	8,197	9,235
Placed on feed (thou head)	24,917	23,326	23,549	5,480	7,365	5,270	5,221	6,336	6,726	—
Marketings (thou head)	22,540	22,887	22,836	5,969	5,224	5,763	5,821	5,876	5,376 5/	5,569
Other disappearance (thou head)	1,632	1,398	1,236	244	324	316	375	233	312	—
<b>Hogs &amp; pigs (10-States) 4/</b>										
Inventory (thou head) 1/	42,420	41,100	39,670	41,650	41,820	41,100	38,210	37,845	39,335	39,670
Breeding (thou head) 1/	5,348	5,258	5,050	5,397	5,377	5,258	4,948	4,840	4,840	5,050
Market (thou head) 1/	37,072	35,842	34,620	36,253	36,443	35,842	33,262	33,005	34,495	34,620
Farrowings (thou head)	9,020	8,831	8,208	2,191	2,265	1,863	2,161	2,034	2,150 5/	1,872
Pig crop (thou head)	67,680	67,648	63,714	16,941	17,255	14,254	16,878	15,853	16,729	—

1/ Beginning of period. 2/ Bushels of corn equal in value to 100 pounds live-weight. 3/ Beginning January 1984 prices are for 14-17 lbs.; January 1986 prices are for 14-18 lbs. 4/ Quarters are Dec. of preceding year-Feb. (I), Mar.-May (II), June-Aug. (III), and Sept.-Nov. (IV). 5/ Intentions. \*Classes estimated.

Information contact: Ron Gustafson (202) 786-1830.



# Crops and Products

Table 17.—Supply and utilization<sup>1,2</sup>

	Area				Production	Total supply	Feed and residual	Other domestic use	Exports	Total use	Ending stocks	Farm price
	Set aside 3/	Planted	Harvested	Yield 4/								
	Mill. acres			Bu./acre								\$/bu
<b>Wheat</b>												
1981/82	0	88.3	80.6	34.5	2,785	3,777	135	712	1,771	2,618	1,159	3.69
1982/83	5.8	86.2	77.9	35.5	2,765	3,932	195	713	1,909	2,417	1,515	3.45
1983/84	30.0	76.4	61.4	39.4	2,420	3,939	369	742	1,429	2,540	1,399	3.31
1984/85*	18.6	79.2	66.9	38.8	2,395	4,003	405	749	1,424	2,578	1,425	3.39
1985/86*	18.8	75.6	64.7	37.5	2,425	3,865	273	771	915	1,960	1,905	3.88
1986/87*	20.5	72.0	60.7	34.4	2,087	4,004	325	780	1,025	2,130	1,874	2.25-2.40
	Mill. acres			lb/acre					Mill. bu			\$/cwt
1981/82	0	3.83	3.79	4,819	182.7	199.6	—	6/ 78.1	82.0	150.6	49.0	9.05
1982/83	0.42	3.30	3.26	4,710	155.6	203.4	—	6/ 62.9	68.9	131.8	71.5	7.91
1983/84	1.74	2.19	2.17	4,598	99.7	171.9	—	6/ 54.7	70.3	125.0	46.9	8.57
1984/85*	.79	2.83	2.80	4,954	138.8	187.3	—	6/ 60.5	62.1	122.6	64.7	8.04
1985/86*	1.24	2.51	2.49	5,414	134.9	201.8	—	6/ 65.8	58.7	124.5	77.3	6.53
1986/87*	1.26	2.40	2.38	5,648	134.4	213.2	—	6/ 67.0	80.0	147.0	66.2	3.45-4.25
<b>Rice</b>												
1981/82	0	84.1	74.5	108.9	8,119	9,512	4,169	796	2,010	6,975	2,537	2.47
1982/83	2.1	81.9	72.7	113.2	8,235	10,772	4,521	894	1,834	7,249	3,523	2.55
1983/84	32.2	60.2	51.5	81.1	4,175	7,700	3,818	975	1,901	6,694	1,006	3.21
1984/85*	3.9	80.5	71.9	106.7	7,674	8,684	4,116	1,055	1,865	7,036	1,648	2.63
1985/86*	5.4	85.4	75.2	118.0	8,877	10,536	4,126	1,129	1,241	6,496	4,040	2.23
1986/87*	13.0	76.7	69.2	119.3	8,253	12,295	4,300	1,150	1,125	6,575	5,720	1.35-1.65
<b>Corn</b>												
1981/82	0	15.9	13.7	64.0	876	1,006	417	10	260	687	319	2.25
1982/83	0.7	16.0	14.1	59.1	835	1,154	495	10	210	715	439	2.47
1983/84	5.7	11.9	10.0	48.7	488	927	385	10	245	640	287	2.74
1984/85*	.6	17.3	15.4	56.4	866	1,154	539	18	297	854	300	2.32
1985/86*	.9	18.3	16.8	66.8	1,120	1,420	662	29	178	869	551	1.93
1986/87*	2.5	15.3	13.9	67.7	942	1,493	575	30	225	830	663	1.30-1.50
<b>Sorghum</b>												
1981/82	0	9.6	9.0	52.4	474	621	198	175	100	473	148	2.48
1982/83	0.4	9.5	9.0	57.2	516	675	241	170	47	458	217	2.18
1983/84	1.1	10.4	9.7	52.3	509	733	282	170	92	544	189	2.47
1984/85*	.5	12.0	11.2	53.4	599	799	304	170	77	551	247	2.29
1985/86*	.7	13.2	11.6	51.0	591	847	333	167	22	522	325	1.98
1986/87*	1.8	13.1	12.0	50.8	610	941	300	175	150	625	316	1.45-1.65
<b>Barley</b>												
1981/82	0	13.6	9.4	54.2	510	689	453	77	7	537	152	1.88
1982/83	0.1	14.0	10.3	57.8	593	749	441	85	3	529	220	1.49
1983/84	.3	20.3	9.1	52.6	477	727	466	78	2	546	181	1.62
1984/85*	.1	12.4	8.2	58.0	474	689	433	74	1	509	180	1.67
1985/86*	.1	13.3	8.2	63.7	521	729	460	83	2	545	184	1.23
1986/87*	0.7	14.7	6.9	56.0	385	598	400	85	2	487	111	1.00-1.20
<b>Oats</b>												
1981/82	0	67.5	66.2	30.1	1,989	2,302	7/ 89	1,030	929	2,048	254	6.04
1982/83	0	70.9	69.4	31.5	2,190	2,444	7/ 86	1,108	905	2,099	345	5.69
1983/84	0	63.8	62.5	26.2	1,636	1,981	7/ 79	983	743	1,805	176	7.83
1984/85*	0	67.8	66.1	28.1	1,861	2,037	7/ 93	1,030	596	1,721	316	5.84
1985/86*	0	63.1	61.6	34.1	2,099	2,415	7/ 86	1,053	740	1,879	536	5.05
1986/87*	0	61.5	59.4	33.8	2,007	2,543	7/ 93	1,105	730	1,928	615	4.50-4.90
<b>Soybeans</b>												
1981/82	—	—	—	—	10,979	12,715	—	9,536	2,077	11,612	1,103	19.0
1982/83	—	—	—	—	12,041	13,144	—	9,858	2,025	11,883	1,261	20.6
1983/84	—	—	—	—	10,872	12,133	—	9,588	1,824	11,412	721	30.6
1984/85*	—	—	—	—	11,468	12,209	—	9,917	1,660	11,577	632	29.5
1985/86*	—	—	—	—	11,617	12,257	—	10,053	1,257	11,310	947	18.0
1986/87*	—	—	—	—	12,003	12,950	—	10,500	1,250	11,750	1,200	13.0-18.0
<b>Soybean oil</b>												
1981/82	—	—	—	—	—	—	—	Thou. tons	—	—	—	9/ \$/ton
1982/83	—	—	—	—	—	—	—	17,714	6,908	24,622	175	183
1983/84	—	—	—	—	—	—	—	19,306	7,109	26,415	474	187
1984/85*	—	—	—	—	—	—	—	17,615	5,360	22,975	255	188
1985/86*	—	—	—	—	—	—	—	19,480	4,917	24,397	387	125
1986/87*	—	—	—	—	—	—	—	19,118	6,008	25,126	212	155
1986/87*	—	—	—	—	—	—	—	19,900	6,350	25,850	330	140-150
<b>Soybean meal</b>												
1981/82	—	—	—	—	24,634	24,797	—	—	—	—	—	—
1982/83	—	—	—	—	26,714	26,889	—	—	—	—	—	—
1983/84	—	—	—	—	22,756	23,230	—	—	—	—	—	—
1984/85*	—	—	—	—	24,529	24,784	—	—	—	—	—	—
1985/86*	—	—	—	—	24,951	25,338	—	—	—	—	—	—
1986/87*	—	—	—	—	25,968	26,180	—	—	—	—	—	—

See footnotes at end of table.

Table 17.— Supply and utilization, continued

	Area				Production	Total supply 4/	Feed and residual	Other domestic use	Exports	Total use	Ending stocks	Farm price 5/
	Set aside 3/	Planted	Harvested	Yield								
	Mill. acres		lb/acre						Mill. bales			¢/lb
Cotton 10/												
1981/82	0	14.3	13.8	542	15.6	18.3	—	5.3	6.6	11.8	6.6	55.4
1982/83	1.6	11.3	9.7	590	12.0	18.6	—	5.5	5.2	10.7	7.9	59.5
1983/84	6.8	7.9	7.3	508	7.8	15.7	—	5.9	6.8	12.7	2.8	65.3
1984/85*	2.5	11.1	10.4	600	13.0	15.8	—	5.5	6.2	11.8	4.1	58.7
1985/86*	3.6	10.7	10.2	630	13.4	17.6	—	6.4	2.0	8.4	9.4	56.8
1986/87*	3.6	10.1	8.5	553	9.8	19.1	—	7.0	6.8	13.8	5.5	—

\*February 9, 1987 Supply and Demand Estimates. 1/ Marketing year beginning June 1 for wheat, barley, and oats, August 1 for cotton and rice, September 1 for soybeans, corn, and sorghum, October 1 for soybean meal, and soybean oil. 2/ Conversion factors: Hectare (ha.) = 2.471 acres, 1 metric ton = 2,204.622 pounds, 36.7437 bushels of wheat or soybeans, 39.3679 bushels of corn or sorghum, 45.9296 bushels of barley, 68.8944 bushels of oats, 22.046 cwt. of rice, and 4.59 480-pound bales of cotton. 3/ Includes diversion, PIR, and acreage reduction programs. 4/ Includes imports. 5/ Market average prices do not include an allowance for loans outstanding and Government purchases. 6/ Residual included in domestic use. 7/ Includes seed. 8/ Average of crude soybean oil, Decatur. 9/ Average of 44 percent, Decatur. 10/ Upland and extra long staple. Stock estimates based on Census Bureau data which results in an unaccounted difference between supply and use estimates and changes in ending stocks.

Information contact: National Economics Division, Crops Branch (202) 786-1840.

Table 18.—Food grains

	Marketing year 1/				1985		1986				
	1982/83	1983/84	1984/85	1985/86	Dec	Aug	Sept	Oct	Nov	Dec	
Wholesale prices											
Wheat, No. 1 HRW, Kansas City (\$/bu) 2/	3.94	3.84	3.74	3.28	3.42	2.48	2.53	2.60	2.68	2.68	
Wheat, DNS, Minneapolis (\$/bu) 2/	3.95	4.21	3.70	3.25	3.45	2.39	2.64	2.70	2.81	2.77	
Rice, S.W. La. (\$/cwt) 3/	18.00	19.38	17.98	16.11	17.50	10.63	10.25	10.25	9.94	10.13	
Wheat											
Exports (mil bu)	1,509	1,429	1,424	915	58	124	104	92	68	58	
Mill grind (mil bu)	656	694	676	707	56	66	67	70	67	NA	
Wheat flour production (mil cwt)	292	308	301	317	25	29	30	31	30	NA	
Rice											
Exports (mil cwt, rough equiv)	68.9	70.3	62.1	58.7	4.2	11.1	11.7	7.8	6.4	4.6	
	Marketing year 1/			1985			1986				
	1983/84	1984/85	1985/86	Apr-May	June-Sept	Oct-Dec	Jan-Mar	Apr-May	June-Aug	Sept-Nov	
Wheat											
Stocks, beginning (mil bu)	1,515	1,399	1,425	1,667	1,425.2	2,971.1	2,526.1	2,130.0	1,905.0	3,154.6	
Domestic use:											
Food (mil bu)	643	651	678	105.8	223.7	176.8	166.9	110.7	171.1	187.7	
Feed & seed (mil bu) 4/	469	502	371	-1.2	334.7	24.9	4.9	1.8	349.8	42.0	
Exports (mil bu)	1,429	1,424	915	139.1	326.6	247.3	226.1	115.3	320.6	264.2	

1/ Beginning June 1 for wheat and August 1 for rice. 2/ Ordinary protein. 3/ Long-grain, milled basis. 4/ Feed use approximated by residual. NA = not available.

Information contacts: Allen Schienbein and Janet Livezey (202) 786-1840.

Table 19.—Cotton

	Marketing year 1/				1985		1986				
	1982/83	1983/84	1984/85	1985/86	Dec	Aug	Sept	Oct	Nov	Dec	
U.S. price, SLM, 1-1/16 in. (cts/lb) 2/	63.1	73.1	60.5	60.0	56.3	26.8	33.6	44.0	45.7	54.2	
Northern Europe prices:											
Index (cts/lb) 3/	76.7	87.6	69.2	48.9	48.3	37.2	43.5	51.2	52.8	59.2	
U.S. M 1-3/32" (cts/lb) 4/	78.0	87.1	73.9	64.8	67.7	37.8	44.7	52.4	54.3	62.1	
U.S. mill consumption (thou bales)	5,512.8	5,927.0	5,544.5	6,398.9	457.5	524.5	602.9	660.4	554.4	547.4	
Exports (thou bales)	5,206.8	6,786.0	6,201.3	1,969.2	196.0	391.7	386.5	646.4	571.0	544.0	
Stocks, beginning (thou bales)	6,632	7,937	2,775	4,102	11,610	9,348	9,335	10,200	12,205	13,357	

1/ Beginning August 1. 2/ Average spot market. 3/ Liverpool Outlook "A" Index; average of five lowest priced of 10 selected growths. 4/ Memphis territory growths.

Information contact: Bob Skinner (202) 786-1840.



Table 20.—Feed grains

	Marketing year 1/				1985	1986				
	1982/83	1983/84	1984/85	1985/86	Dec	Aug	Sept	Oct	Nov	Dec
<b>Wholesale prices</b>										
Corn, No. 2 yellow, Chicago (\$/bu)	2.98	3.46	2.79	2.35	2.50	1.68	1.49	1.51	1.68	1.66
Sorghum, No. 2 yellow, Kansas City (\$/cwt)	4.80	5.22	4.46	3.72	3.97	2.71	2.47	2.60	2.70	2.62
Barley, feed, Minneapolis (\$/bu)	1.76	2.48	2.09	1.53	1.60	1.12	1.27	1.50	1.63	1.23
Barley, malting, Minneapolis (\$/bu)	2.53	2.84	2.55	2.24	2.29	1.61	1.76	1.93	2.02	1.88
<b>Exports</b>										
Corn (mil bu)	1,834	1,902	1,865	1,241	179	52	81	125	115	111
Feed grains (mil metric tons) 2/	53.0	56.5	56.6	36.6	4.8	1.8	2.7	4.1	3.6	4.3
	Marketing year 1/				1985	1986				
	1982/83	1983/84	1984/85	1985/86	June-Aug	Sept-Nov	Dec-Feb	Mar-May	June-Aug	Sept-Nov
<b>Corn</b>										
Stocks, beginning (mil bu)	2,537	3,523	1,006	1,648	2,836	1,648	8,615	6,587	4,990	4,040
<b>Domestic use:</b>										
Feed (mil bu)	4,521	3,818	4,116	4,126	612	1,222	1,305	1,093	507	1,394
Food, seed, ind. (mil bu)	895	975	1,055	1,129	280	272	259	302	296	275
Exports (mil bu)	1,834	1,902	1,865	1,241	296	418	465	204	154	321
Total use (mil bu)	7,249	6,694	7,036	6,496	1,188	1,911	2,029	1,599	956	1,990

1/ September 1 for corn and sorghum; June 1 for oats and barley. 2/ Aggregated data for corn, sorghum, oats, and barley.

Information contacts: Dave Hull (202) 786-1840; Jim Cole (202) 786-1693.

Table 21.—Fats and oils

	Marketing year 1/				1985	1986				
	1982/83	1983/84	1984/85	1985/86	Dec	Aug	Sept	Oct	Nov	Dec
<b>Soybeans</b>										
Wholesale price, No. 1 yellow, Chicago (\$/bu) 2/	6.11	7.78	5.88	5.20	5.21	4.71	4.74	4.74	4.96	4.88
Crushings (mil bu)	1,107.8	982.7	1,030.5	1,052.8	100.8	78.4	79.4	107.0	109.3	107.5
Exports (mil bu)	905.2	742.8	598.2	740.0	94.1	21.0	30.2	89.7	96.6	88.2
Stocks, beginning (mil bu)	254.5	344.6	175.7	316.0	113.4	40.2	28.5	38.3	108.1	127.4
<b>Soybean oil</b>										
Wholesale price, crude, Decatur (cts/lb)	20.62	30.55	29.52	18.0	21.39	14.28	13.94	14.63	14.88	14.94
Production (mil lb)	12,040.4	10,872.0	11,467.9	11,620.4	1,095.8	875.5	889.3	1,166.5	1,171.5	1,150.2
Domestic disp. (mil lb)	9,857.3	9,598.6	9,916.7	10,062.8	862.4	856.4	877.6	999.1	867.5	888.4
Exports (mil lb)	2,024.7	1,813.6	1,659.8	1,257.2	74.2	187.7	223.4	146.5	27.4	25.3
Stocks, beginning (mil lb)	1,102.5	1,260.9	720.5	632.5	810.4	1,320.8	1,152.2	946.6	963.6	1,268.9
<b>Soybean meal</b>										
Wholesale price, 44% protein, Decatur (\$/ton)	187.19	188.21	125.46	154.90	145.00	163.50	165.20	165.40	154.00	149.60
Production (thou ton)	26,713.6	22,756.2	24,529.3	24,957.8	2,379.9	1,863.4	1,878.7	2,521.3	2,562.8	2,517.7
Domestic disp. (thou ton)	19,306.0	17,615.2	19,481.7	19,122.3	1,752.2	1,428.8	1,644.6	2,005.8	1,575.4	1,788.7
Exports (thou ton)	7,108.7	5,359.7	4,916.5	6,007.0	638.5	345.0	312.9	511.5	818.4	877.7
Stocks, beginning (thou ton)	175.2	474.1	255.4	387.0	369.2	250.6	298.3	211.7	218.0	387.2
<b>Margarine, wholesale price, Chicago, white (cts/lb)</b>										
	41.1	46.3	55.4	42.1	43.6	37.95	38.00	38.09	38.90	38.60

1/ Beginning September 1 for soybeans; October 1 for soybean meal and oil; calendar year for margarine. 2/ Beginning April 1, 1982, prices based on 30-day delivery, using upper end of the range.

Information contacts: Roger Hoskin (202) 786-1840; Tom Bickerton (202) 786-1691.

Table 22.—Fruit

	Calendar years											
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986 F
<b>Citrus</b>												
Production (thou tons)	14,586	14,788	15,242	14,255	13,329	16,484	15,105	12,057	13,608	10,792	10,488 5/	12,149
Per capita consumption (lbs) 1/	119.5	117.8	118.8	108.1	108.8	113.1	104.7	110.0	120.7	103.2	115.4	119.4
<b>Non citrus</b>												
Production (thou tons)	12,384	11,846	12,274	12,460	13,689	15,152	12,961	14,217	14,154	14,290	14,210	13,933
Per capita consumption (lbs) 1/	85.5	84.4	84.8	83.3	85.9	87.4	88.2	89.3	89.2	93.4	95.1	94.0
1986												
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
<b>Fob shipping point prices</b>												
Apples (\$/carton) 2/	13.60	15.00	14.85	15.62	18.10	18.50	22.86	NA	17.03	13.70	13.63	14.00
Pears (\$/box) 3/	14.00	15.59	15.50	NA	24.18	25.70	NA	14.67	14.00	15.00	15.10	14.90
Oranges (\$/box) 4/	4.27	3.71	3.85	3.79	4.19	4.27	3.63	4.03	4.34	4.47	6.58	4.24
Grapefruit (\$/box) 4/	3.78	3.76	3.94	4.22	5.20	5.98	6.17	6.76	6.63	6.29	4.19	4.54
<b>Stocks, ending</b>												
Fresh apples (mil lbs)	2,125.2	1,550.2	1,039.3	612.6	267.2	118.8	25.4	7.9	2,349.5	4,142.7	3,532.2	2,875.7
Fresh pears (mil lbs)	142.9	181.3	71.6	35.5	4.9	.7	75.0	124.4	325.1	333.2	281.2	214.7
Frozen fruits (mil lbs)	656.5	597.1	544.6	496.9	461.4	558.1	719.6	741.1	740.7	855.6	777.5	721.4
Frozen orange juice (mil lbs)	888.4	966.8	911.5	1,031.6	1,047.5	1,056.9	920.3	855.3	715.4	577.6	524.8	621.1

1/ Per capita consumption of both fresh and processed fruit in fresh weight equivalent. Eighteen fruit items are not included in this year's new per capita consumption series. 2/ Red Delicious, Washington, extra fancy, carton tray pack, 80-113's. 3/ D'Anjou, Washington, standard box wrapped, U.S. No. 1, 90-135's. 4/ U.S. equivalent on-free returns. 5/ As of February 1, 1987. NA = not available. F = forecast.

Information contact: Ben Huang (202) 786-1767.

Table 23.—Vegetables

	Calendar years												
	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986			
Production													
Total vegetables (1,000 cwt) 1/	402,936	382,165	413,925	381,370	379,123	431,515	403,320	457,392	453,769	445,436			
Fresh (1,000 cwt) 1/ 2/	176,541	182,563	190,859	190,228	194,694	207,924	197,919	217,132	217,932	213,724			
Processed (tons) 3/	11,319,750	9,980,100	11,153,300	9,557,100	9,221,460	11,179,590	10,270,050	12,013,020	11,791,860	11,585,630			
Mushrooms (1,000 lbs)	398,703	454,007	470,069	469,576	517,146	490,826	561,531	595,681	587,956	NA			
Potatoes (1,000 cwt)	355,334	366,314	342,447	302,857	338,591	355,131	333,911	362,612	407,109	352,274			
Sweetpotatoes (1,000 cwt)	11,885	13,115	13,370	10,953	12,799	14,833	12,083	12,986	14,853	12,754			
Dry edible beans (1,000 cwt)	16,555	18,935	20,552	26,729	32,751	25,563	15,520	21,070	22,175	22,898			
	1985												
	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
Shipments													
Fresh (1,000 cwt) 4/	14,021	22,189	16,643	17,454	19,210	32,927	26,825	27,818	17,579	15,174	19,275	15,967	15,766
Potatoes (1,000 cwt)	10,147	12,965	10,726	11,953	13,604	16,037	9,882	7,757	8,066	7,907	11,332	9,928	10,836
Sweetpotatoes (1,000 cwt)	504	352	313	413	227	250	177	160	96	246	428	786	389

1/ 1983 data are not comparable with 1984 and 1985. 2/ Estimate reinstated for asparagus with the 1984 crop, all other years also include broccoli, carrots, cauliflower, celery, sweet corn, lettuce, honeydews, onions, and tomatoes. 3/ Estimates reinstated for cucumbers with the 1984 crop, all other years also include snap beans, sweet corn, green peas, and tomatoes. 4/ Includes snap beans, broccoli, cabbage, carrots, cauliflower, celery, sweet corn, cucumbers, eggplant, lettuce, onions, bell peppers, squash, tomatoes, cantaloupes, honeydews, and watermelons. NA = not available.

Information contact: Shannon Hamm (202) 786-1767.

Table 24.—Other commodities

	Annual					1985					1986				
	1982	1983	1984	1985	1986 F	Oct-Dec	Jan-Mar	Apr-June	July-Sept	Oct-Dec	Oct-Dec	Jan-Mar	Apr-June	July-Sept	Oct-Dec
<b>Sugar</b>															
Production 1/	5,936	5,682	5,890	5,969	6,275	2,992	1,619	746	2,292	3,997					
Deliveries 1/	9,153	8,812	8,454	8,035	7,810	2,004	1,834	1,913	2,069	1,993					
Stocks, ending 1/	3,068	2,570	3,005	3,126	3,130	3,126	3,384	2,552	1,652	3,475					
<b>Coffee</b>															
Composite green price N.Y. (cts/lb)	132.00	131.51	142.95	137.46	185.18	152.81	215.33	190.79	174.92	159.69					
Imports, green bean equiv. (million lbs) 2/	2,352	2,259	2,411	2,550	2,596	612	810	653	635	498					
1985															
	1984	1985	1986	Oct	May	June	July	Aug	Sept	Oct					
<b>Tobacco</b>															
Prices at auctions 3/															
Flue-cured (dol/lb)	1.81	1.72	1.52	1.79	NQ	NQ	NQ	1.44	1.60	1.50					
Burley (dol/lb)	1.88	1.59	1.57	NQ	NQ	NQ	NQ	NQ	NQ	NQ					
Domestic consumption 4/															
Cigarettes (bil)	600.4	594.0	584.0	70.6	52.4	56.0	38.4	51.4	50.8	---					
Large cigars (mil)	3,493	3,226	3,090	292.8	279.4	281.2	270.4	251.7	270.7	---					

1/ 1,000 short tons, raw value. Quarterly data shown at end of each quarter. 2/ Green and processed coffee. 3/ Crop year July-June for flue-cured, October-September for burley. 4/ Taxable removals. F = forecast. NQ = no quote.

Information contacts: (sugar) Dave Harvey (202) 786-1769; (coffee) Fred Gray (202) 786-1769; (tobacco) Verner Grise (202) 786-1840.



Table 25.—World supply and utilization of major crops, livestock and products

	1980/81	1981/82	1982/83	1983/84	1984/85 E	1985/86 P	1986/87 F
Million units							
<b>Wheat</b>							
Area (hectare)	237.0	238.7	237.7	229.1	231.4	229.3	227.7
Production (metric ton)	443.0	449.5	477.5	489.5	511.5	499.7	527.9
Exports (metric ton) 1/	94.1	101.3	98.7	102.0	106.9	85.2	87.7
Consumption (metric ton) 2/	445.8	443.6	462.2	482.3	495.0	487.7	513.1
Ending stocks (metric ton) 3/	78.2	87.0	102.3	109.5	126.1	137.1	151.8
<b>Coarse grains</b>							
Area (hectare)	342.4	349.9	339.7	335.3	335.5	338.9	335.1
Production (metric ton)	732.9	766.0	784.4	687.7	814.1	844.1	835.8
Exports (metric ton) 1/	108.0	96.6	89.6	91.2	100.7	83.4	81.5
Consumption (metric ton) 2/	745.1	737.7	752.6	762.2	783.7	770.3	788.4
Ending stocks (metric ton) 3/	90.6	120.7	152.5	77.9	108.3	182.2	229.5
<b>Rice, milled</b>							
Area (hectare)	144.5	145.2	141.1	144.3	144.4	142.2	144.4
Production (metric ton)	271.0	280.6	285.7	308.0	319.2	319.8	318.4
Exports (metric ton) 4/	13.1	11.8	11.9	12.6	11.5	12.8	11.2
Consumption (metric ton) 2/	272.3	281.5	290.1	308.8	314.3	317.6	321.3
Ending stocks (metric ton) 3/	22.1	21.3	17.3	17.2	22.2	24.4	21.5
<b>Total grains</b>							
Area (hectare)	723.9	733.8	718.5	708.7	711.3	710.4	707.2
Production (metric ton)	1,446.9	1,496.1	1,547.6	1,485.2	1,644.8	1,662.6	1,682.1
Exports (metric ton) 1/	215.2	209.7	200.2	205.8	219.1	181.4	180.4
Consumption (metric ton) 2/	1,463.2	1,462.8	1,504.9	1,553.3	1,593.0	1,575.6	1,622.8
Ending stocks (metric ton) 3/	190.9	229.0	272.1	204.6	256.6	343.7	402.8
<b>Oilseeds</b>							
Crush (metric ton)	129.8	138.9	143.5	136.8	150.8	154.4	154.9
Production (metric ton)	154.9	169.4	178.3	165.7	191.0	195.8	195.9
Exports (metric ton)	31.3	35.9	35.1	33.0	32.8	34.0	34.9
Ending stocks (metric ton)	15.8	13.5	20.5	15.8	21.1	26.2	29.4
<b>Meals</b>							
Production (metric ton)	88.8	94.5	98.0	92.8	101.8	104.0	105.2
Exports (metric ton)	26.9	28.8	31.6	29.6	32.2	33.7	33.9
<b>Oils</b>							
Production (metric ton)	39.1	41.6	43.4	42.5	46.3	49.4	49.1
Exports (metric ton)	12.6	13.4	14.0	13.6	15.5	16.3	15.9
<b>Cotton</b>							
Area (hectare)	32.1	33.0	31.4	31.0	33.9	31.7	29.9
Production (bale)	65.0	71.2	68.0	67.7	88.1	78.9	68.9
Exports (bale)	19.7	20.2	19.4	19.2	20.5	20.3	23.3
Consumption (bale)	65.8	66.0	68.1	68.5	69.9	74.7	77.1
Ending stocks (bale)	21.3	21.1	25.9	25.0	43.1	48.3	39.5
	1981	1982	1983	1984	1985	1986 F	1987 F
<b>Red meat</b>							
Production (mil metric tons)	93.6	93.9	96.4	98.1	101.8	102.2	102.6
Consumption (mil metric tons)	92.0	92.2	94.7	96.1	99.7	100.9	101.1
Exports (mil metric tons) 1/	5.7	5.8	5.8	5.9	6.3	6.1	6.4
<b>Poultry</b>							
Production (mil metric tons)	22.5	23.1	23.5	24.2	25.2	26.1	27.3
Consumption (mil metric tons)	22.1	22.7	23.5	24.0	24.8	25.6	26.8
Exports (mil metric tons) 1/	1.5	1.4	1.3	1.2	1.2	1.2	1.3
<b>Dairy</b>							
Milk production	389.7	396.9	412.5	413.0	417.9	423.2	423.4

E = estimated. P = projected. F = forecast. 1/ Excludes intra-EC trade. 2/ Where stocks data not available (excluding USSR), consumption includes stock changes. 3/ Stocks data are based on differing marketing years and do not represent levels at a given date. Data not available for all countries; includes estimated change in USSR grain stocks but not absolute level. 4/ Calendar year data. 1981 data correspond with 1980/81, etc.

Information contact: Frederic Surls (202) 786-1693.

## U.S. Agricultural Trade

Table 26.—Prices of principal U.S. agricultural trade products

	Annual			1985	1986					
	1984	1985	1986	Dec	July	Aug	Sept	Oct	Nov	Dec
Export commodities										
Wheat, f.o.b. vessel, Gulf ports (\$/bu)	4.17	3.73	3.19	3.77	2.80	2.82	2.83	2.86	2.90	2.97
Corn, f.o.b. vessel, Gulf ports (\$/bu)	3.50	2.89	2.27	2.81	2.17	1.89	1.71	1.69	1.89	1.89
Grain sorghum, f.o.b. vessel, Gulf ports (\$/bu)	3.00	2.64	2.16	2.56	1.94	1.70	1.73	1.81	1.89	1.84
Soybeans, f.o.b. vessel, Gulf ports (\$/bu)	7.38	5.83	5.45	5.56	5.45	5.38	5.37	5.13	5.24	5.14
Soybean oil, Decatur (cts/lb)	30.75	27.03	16.36	21.26	16.21	14.16	13.84	14.61	14.66	14.68
Soybean meal, Decatur (\$/ton)	166.80	127.15	157.62	145.95	162.15	164.76	166.19	152.85	154.05	149.54
Cotton, 8 market avg. spot (cts/lb)	68.37	58.55	53.47	56.25	65.73	26.81	33.56	43.91	45.75	54.15
Tobacco, avg. price at auction (cts/lb)	170.64	172.05	154.26	162.96	158.01	142.95	151.92	145.48	146.40	146.40
Rice, f.o.b. mill, Houston (\$/cwt)	19.47	18.49	14.60	18.30	13.00	13.00	13.00	13.00	13.00	13.00
Inedible tallow, Chicago (cts/lb)	17.47	14.33	9.03	11.38	7.78	7.81	8.10	8.44	8.47	9.40
Import commodities										
Coffee, N.Y. spot (\$/lb)	1.46	1.42	2.01	1.75	1.88	1.85	2.03	1.87	1.67	1.46
Rubber, N.Y. spot (cts/lb)	49.70	41.91	42.87	40.28	43.51	43.45	45.29	46.87	44.78	44.67
Cocoa beans, N.Y. (\$/lb)	1.06	.99	.88	1.02	.88	.89	.96	.91	.87	.86

Information contact: Mary Teymourian (202) 786-1692.

Table 27.—Indexes of nominal and real trade-weighted dollar exchange rates

	1986												1987
	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	
	1980=100												
Total U.S. trade													
Nominal	129	126	125	123	124	NA	NA	NA	NA	NA	NA	NA	
Real	130	127	126	124	125	NA	NA	NA	NA	NA	NA	NA	
	April 1971=100												
Agricultural trade													
Nominal 1/	4,093	4,495	4,500	4,511	4,498	4,567	4,661	4,680	4,729	4,791	4,900	5,236	
Real 2/	88	86	85	84	85	85	87	87*	88	89*	88*	86*	
Soybeans													
Nominal 1/	107	105	105	103	103	161	250	266	280	294	305	314	
Real 2/	79	76	76	74	75	75	75*	75*	75*	76*	75*	72*	
Wheat													
Nominal 1/	23,953	26,425	26,457	26,533	26,449	26,499	26,503	26,512	26,714	27,006	27,604	29,548	
Real 2/	102	102	101	100	101	100	102*	102*	104*	106*	105*	106*	
Corn													
Nominal 1/	3,720	4,081	4,086	4,095	4,083	4,172	4,297	4,320	4,369	4,430	4,534	4,842	
Real 2/	81	79	78	77	77	78	80*	80*	80*	81*	80*	77*	
Cotton													
Nominal 1/	214	228	227	226	233	231	230	233	236	237	237	234	
Real 2/	95	94	93	92	92	91	90*	91*	92*	93*	92*	91*	

1/ Nominal values are percentage changes in currency units per dollar, weighted by proportion of agricultural exports from the United States. An increase indicates that the dollar has appreciated. 2/ Real values are computed in the same way as the nominal series, adjusted for CPI changes in the countries involved.

\*Preliminary; assumes the same rate of CPI increase/decrease as the previous six months. NA = Not available.

Information contact: Edward Wilson (202) 786-1688.

Table 28.—Trade balance

	Fiscal years*									Dec
	1979	1980	1981	1982	1983	1984	1985	1986	1987 F	1986
	\$ million									
<b>Exports</b>										
Agricultural	31,979	40,481	43,780	39,095	34,769	38,027	31,201	26,325	26,000	2,566
Nonagricultural	135,839	169,846	185,423	176,310	159,373	170,014	179,236	176,613	NA	15,211
Total 1/	167,818	210,327	229,203	215,405	194,142	208,041	210,437	202,938	NA	17,777
<b>Imports</b>										
Agricultural	16,186	17,276	17,218	15,481	16,271	18,916	19,740	20,875	20,000	1,515
Nonagricultural	177,424	223,590	237,469	233,353	230,629	297,736	313,722	342,855	NA	26,280
Total 2/	193,610	240,866	254,687	248,834	246,900	316,652	333,462	363,730	NA	27,795
<b>Trade balance</b>										
Agricultural	15,793	23,205	26,562	23,614	18,498	19,111	11,461	5,450	6,000	1,051
Nonagricultural	-41,585	-53,744	-52,046	-57,043	-71,256	-127,722	-134,486	-166,242	NA	-11,069
Total	-25,792	-30,539	-25,484	-33,429	-52,758	-108,611	-123,025	-160,792	NA	-10,018

\*Fiscal years begin October 1 and end September 30. Fiscal year 1986 began Oct. 1, 1985 and ended Sept. 30, 1986.

1/ Domestic exports including Department of Defense shipments (F.A.S. value). 2/ Imports for consumption (customs value).

NA = not available. F = forecast.

Information contact: Steve MacDonald (202) 786-1621.



Table 29.—U.S. agricultural exports and imports

	Fiscal years*				Dec	Fiscal years*				Dec
	1984	1985	1986	1987 F	1986	1984	1985	1986	1987 F	1986
	Thousand units					\$ million				
Exports										
Animals, live (no) 1/	754	996	570	—	25	276	255	344	—	51
Meats & preps., excl. poultry (mt)	422	427	451	2/ 400	47	929	906	1,012	—	108
Dairy products (mt)	418	423	481	—	31	393	414	430	400	28
Poultry meats (mt)	225	234	265	300	30	280	257	282	—	35
Fats, oils, & greases (mt)	1,395	1,217	1,355	3/ 1,300	125	703	608	477	—	40
Hides & skins incl. furskins	—	—	—	—	—	1,318	1,325	1,456	—	123
Cattle hides, whole (no) 1/	24,283	25,456	25,973	—	1,975	1,010	1,019	1,150	—	91
Mink pelts (no) 1/	2,551	2,237	2,697	—	95	67	60	65	—	2
Grains & feeds (mt)	108,194	93,903	74,437	—	6,287	17,304	13,285	9,476	4/ 8,200	662
Wheat (mt)	41,699	28,523	25,490	26,500	1,389	6,497	4,264	3,259	5/ 3,000	157
Wheat flour (mt)	1,071	718	1,137	1,300	128	234	164	204	—	16
Rice (mt)	2,293	1,972	2,382	2,600	150	897	677	648	500	36
Feed grains, incl. products (mt)	55,546	55,362	36,293	40,400	3,625	8,217	6,884	3,819	3,000	288
Feeds & fodders (mt)	7,021	6,533	8,381	6/ 8,500	944	1,216	1,004	1,289	—	146
Other grain products (mt)	564	795	754	—	51	243	293	257	—	19
Fruits, nuts, and preps. (mt)	1,931	1,907	2,003	—	153	1,594	1,687	1,766	—	152
Fruit juices incl. froz. (hl) 1/	5,598	4,641	3,652	—	313	223	200	148	—	13
Vegetables & preps. (mt)	1,527	1,420	1,467	—	187	999	946	1,000	—	121
Tobacco, unmanufactured (mt)	227	257	224	200	48	1,433	1,588	1,318	1,400	247
Cotton, excl. linters (mt)	1,481	1,277	482	1,400	118	2,395	1,945	678	1,700	124
Seeds (mt)	252	289	269	—	36	326	352	366	400	50
Sugar, cane or beet (mt)	285	355	375	—	40	74	65	75	—	8
Oilseeds & products (mt)	26,961	23,803	27,557	—	3,399	8,602	6,195	6,266	7/ 6,000	694
Oilseeds (mt)	20,466	17,886	20,684	8/ 21,100	2,510	6,254	4,324	4,394	—	492
Soybeans (mt)	19,265	16,621	20,139	20,700	2,400	5,734	3,876	4,174	4,000	461
Protein meal (mt)	5,060	4,606	5,588	5,500	814	1,217	853	1,127	1,000	161
Vegetable oils (mt)	1,435	1,311	1,284	—	76	1,131	1,018	746	—	41
Essential oils (mt)	11	12	7	—	1	96	105	105	—	9
Other	465	443	568	—	82	1,082	1,069	1,126	—	100
Total	143,794	125,967	109,941	116,500	10,584	38,027	31,201	26,325	26,000	2,566
Imports										
Animals, live (no) 1/	1,907	2,120	1,885	—	319	596	569	637	700	89
Meats & preps., excl. poultry (mt)	905	1,123	1,139	1,127	76	1,931	2,214	2,248	2,400	172
Beef & veal (mt)	550	674	693	712	40	1,165	1,295	1,252	1,500	77
Pork (mt)	328	416	406	415	33	703	847	900	900	88
Dairy products (mt)	382	418	400	410	33	757	763	786	800	71
Poultry and products 1/	—	—	—	—	—	122	93	101	—	9
Fats, oils, & greases (mt)	18	21	22	—	2	13	18	17	—	1
Hides & skins, incl. furskins 1/	—	—	—	—	—	216	240	200	—	25
Wool, unmanufactured (mt)	59	43	53	—	5	193	145	160	—	15
Grains & feeds (mt)	1,805	2,070	2,311	2,580	151	534	604	668	700	50
Fruits, nuts, & preps., excl. juices (mt)	4,036	4,483	4,637	4,830	310	1,634	1,891	1,976	2,000	133
Bananas & plantains (mt)	2,727	3,022	3,042	3,100	223	666	752	740	700	55
Fruit juices (hl) 1/	27,247	35,112	31,539	28,000	2,626	671	995	698	600	55
Vegetables & preps. (mt)	2,093	2,140	2,199	2,260	178	1,314	1,347	1,560	1,500	106
Tobacco, unmanufactured (mt)	190	191	208	220	12	563	556	605	700	36
Cotton, unmanufactured (mt)	32	31	41	—	1	17	17	14	—	9/
Seeds (mt)	82	92	89	88	9	97	91	111	100	13
Nursery stock & cut flowers 1/	—	—	—	—	—	292	318	353	—	7
Sugar, cane or beet (mt)	2,829	2,338	1,905	1,900	112	1,144	912	654	—	45
Oilseeds & products (mt)	1,137	1,271	1,508	1,789	112	799	784	639	600	38
Oilseeds (mt)	223	253	197	—	8	95	98	69	—	4
Protein meal (mt)	118	159	138	—	19	21	17	15	—	2
Vegetable oils (mt)	797	859	1,173	—	85	683	670	555	—	32
Beverages excl. fruit juices (hl) 1/	14,120	15,494	15,488	—	1,020	1,547	1,622	1,848	—	138
Coffee, tea, cocoa, spices (mt)	1,776	1,868	1,940	1,868	126	4,777	4,983	6,099	5,400	386
Coffee, incl. products (mt)	1,128	1,128	1,223	1,160	74	3,300	3,244	4,400	3,800	267
Cocoa beans & products (mt)	451	539	507	525	36	1,058	1,285	1,189	1,200	79
Rubber & allied gums (mt)	809	799	801	800	58	854	680	615	600	48
Other	—	—	—	—	—	844	900	885	—	61
Total	—	—	—	—	—	18,916	19,740	20,875	20,000	1,515

\*Fiscal years begin October 1 and end September 30. Fiscal year 1986 began Oct. 1, 1985 and ended Sept. 30, 1986. — not available. 1/ Not included in total volume. 2/ Forecasts for footnoted items 3/-8/ are based on slightly different groups of commodities. Fiscal 1986 exports of categories used in the 1987 forecasts were: 2/ 413 thousand mt. 3/ 1,306 thousand mt. 4/ 9,648 million. 5/ 3,489 million, i.e. includes flour. 6/ 8,218 thousand mt. 7/ 6,439 million. 8/ 20,481 thousand mt. 9/ Less than \$500. F = forecast.

Information contact: Steve MacDonald (202) 786-1621,

Table 30. U.S. agricultural exports by regions

Region & country	Fiscal years*				Dec*	Change from year* earlier				Dec*
	1984	1985	1986	1987 F	1986	1984	1985	1986	1987 F	1986
	\$ million					Percent				
Western Europe	9,265	7,183	6,857	6,700	758	-9	-22	-5	-3	6
European Community (EC-12)	8,650	6,668	6,442	6,300	724	9	-23	-3	-2	7
Belgium-Luxembourg	836	470	361	—	37	3	-44	-23	—	-9
France	510	396	431	—	41	-1	-22	9	—	-32
Germany, Fed. Rep.	1,260	900	1,001	—	106	-13	-29	11	—	20
Italy	771	677	693	—	60	-4	-12	2	—	-21
Netherlands	2,227	1,926	2,042	—	237	-21	-14	6	—	23
United Kingdom	790	628	628	—	81	-4	-20	0	—	93
Portugal	702	502	308	—	47	10	-28	-39	—	58
Spain, Incl. Canary Islands	1,232	832	723	—	81	3	-32	-13	—	-36
Other Western Europe	615	515	415	400	34	-10	-16	-19	0	-12
Switzerland	311	232	128	—	12	-12	-26	-45	—	-14
Eastern Europe	741	532	447	400	72	-10	-28	-16	0	9
German Dem. Rep.	132	81	52	—	26	7	-39	-36	—	169
Poland	197	126	42	—	2	-15	-36	-66	—	-67
Yugoslavia	180	137	134	—	15	-28	-24	-2	—	-58
Romania	155	88	112	—	16	35	-43	27	—	0
USSR	2,512	2,525	1,105	600	0	156	1	-56	-45	-100
Asia	15,209	11,933	10,498	10,700	1,073	12	-22	-12	2	-3
West Asia (Mideast)	1,865	1,452	1,243	1,300	141	26	-22	-14	8	7
Turkey	222	129	111	—	10	693	-42	-13	—	159
Iraq	423	371	321	—	48	31	-12	-13	—	-1
Israel	351	300	255	—	15	20	-15	-15	—	-33
Saudi Arabia	497	381	335	—	35	11	-23	-12	—	-4
South Asia	867	599	517	400	14	-26	-31	-14	-2	-72
Bangladesh	157	205	94	—	1	3	31	-54	—	217
India	376	129	90	—	6	-51	-66	-30	—	-37
Pakistan	285	228	285	—	0	33	-20	25	—	-98
China	692	239	88	100	3	27	-65	-63	0	-84
Japan	6,935	5,663	5,139	5,100	542	18	-18	-9	0	1
Southeast Asia	1,218	842	725	800	58	1	-31	-14	14	-2
Indonesia	438	204	172	—	11	7	-53	-16	—	108
Philippines	300	285	270	—	21	-21	-5	-5	—	-42
Other East Asia	3,631	3,138	2,787	3,000	315	10	-14	-11	7	5
Taiwan	1,409	1,342	1,108	—	157	14	-5	-17	—	3
Korea, Rep.	1,816	1,400	1,277	—	126	6	-23	-9	—	2
Hong Kong	407	396	399	—	33	18	-3	1	—	21
Africa	2,868	2,527	2,135	2,000	171	26	-12	-16	-5	-5
North Africa	1,542	1,207	1,402	1,400	132	6	-22	16	0	14
Morocco	341	156	159	—	8	52	-54	2	—	95
Algeria	162	220	330	—	5	-20	36	50	—	-85
Egypt	882	766	875	—	102	-3	-13	14	—	25
Sub-Saharan	1,327	1,320	733	600	39	62	-1	-44	-14	-40
Nigeria	345	367	158	—	18	4	6	-57	—	9
Rep. S. Africa	525	189	70	—	7	304	-64	-63	—	114
Latin America & Caribbean	5,279	4,570	3,599	3,900	331	9	-13	-21	8	9
Brazil	438	557	444	—	56	10	27	-20	—	33
Caribbean Islands	827	771	752	700	68	7	-7	-2	0	23
Central America	396	361	334	400	31	11	-9	-7	33	61
Colombia	220	238	137	—	8	-14	8	-42	—	-53
Mexico	1,966	1,566	1,115	1,400	101	11	-20	-29	27	-3
Peru	227	106	108	—	18	-12	-53	2	—	103
Venezuela	778	721	493	—	34	26	-7	-32	—	-20
Canada	1,936	1,727	1,466	1,600	146	4	-11	-15	7	32
Oceania	216	204	216	200	14	-4	-6	6	0	31
Total	38,027	31,201	26,325	26,000	2,566	9	-18	-16	-1	-3
Developed Countries	19,180	15,225	13,963	13,600	1,479	4	-21	-8	-3	6
Less Developed Countries	14,902	12,680	10,721	11,300	1,012	7	-15	-15	6	1
Centrally Planned Countries	3,945	3,296	1,640	1,100	75	67	-16	-50	-31	-69

\*Fiscal years begin October 1 and end September 30. Fiscal year 1986 began Oct. 1, 1985 and ended Sept. 30, 1986. F = forecast.  
 — not available.

Note: Adjusted for transshipments through Canada.

Information contact: Steve MacDonald (202) 786-1621.



## Table 31.—Farm income statistics

	Calendar years										
	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986 F	1987 F
	\$ billion										
1. Farm receipts	97.5	114.3	133.8	142.0	144.1	147.1	140.9	146.4	148.5	138	134
Crops (incl. net CCC loans)	48.6	53.2	62.3	71.7	72.5	72.4	67.0	69.2	72.7	62	58
Livestock	47.6	59.2	69.2	68.0	69.2	70.2	69.5	72.9	69.4	71	71
Farm related 1/	1.2	1.9	2.2	2.3	2.5	4.5	4.4	4.3	6.4	5	5
2. Direct Government payments	1.8	3.0	1.4	1.3	1.9	3.5	9.3	8.4	7.7	12	16
Cash payments	1.8	3.0	1.4	1.3	1.9	3.5	4.1	4.0	7.6	8	9
Value of PIK commodities	0.0	0.0	0.0	0.0	0.0	0.0	5.2	4.5	0.1	4	7
3. Total gross farm income (4+5+6)	108.8	128.4	150.7	149.3	166.3	163.4	152.4	174.4	166.6	158	156
4. Gross cash income (1+2) 2/	99.3	117.3	135.1	143.3	146.0	150.6	150.2	154.9	156.2	150	150
5. Nonmoney income 3/	8.4	9.3	10.6	12.3	13.8	14.1	13.2	13.3	11.5	10	9
6. Value of inventory change	1.1	1.9	5.0	-6.3	6.5	-1.3	-10.9	6.3	-1.1	-3	-3
7. Cash expenses 4/	71.4	84.2	101.7	109.1	113.2	113.8	113.0	115.6	112.1	106	103
8. Total expenses	88.9	103.2	123.3	133.1	139.4	140.7	139.5	141.7	136.1	129	124
9. Net cash income (4-7)	27.8	33.1	33.4	34.2	32.8	36.8	37.1	39.3	44.0	44	47
10. Net farm income (3-8)	19.9	25.2	27.4	16.1	26.9	22.7	13.0	32.7	30.5	29	32
Deflated (1982\$)	29.5	34.9	34.9	18.8	28.6	22.7	12.5	30.3	27.3	26	27
11. Off-farm income	26.1	29.7	33.8	34.7	35.8	36.4	37.0	37.9	40.8	43	44
12. Loan changes 5/: Real estate	7.6	7.6	13.0	9.3	9.4	4.0	2.5	-0.8	-5.6	-5	-3
13. 5/: Nonreal estate	6.8	8.3	10.9	5.9	6.2	3.4	1.0	-0.8	-9.2	-6	-3
14. Rental income plus monetary change	3.5	4.1	6.3	6.1	6.4	6.4	5.7	7.8	8.0	7	7
15. Capital expenditures 5/	15.0	17.9	19.9	18.0	16.8	13.7	13.0	12.5	10.1	8	7
16. Net cash flow (9+12+13+14-15)	30.8	35.1	43.7	37.5	37.9	37.0	33.3	33.0	27.1	32	41

F = midpoint of forecast range. 1/ Income from machine hire, custom work, sales of forest products, and other misc. cash sources. 2/ Numbers in parentheses indicate the combination of items required to calculate a given item. 3/ Value of home consumption of self-produced food and imputed gross rental value of farm dwellings. 4/ Excludes capital consumption, perquisites to hired labor, and farm household expenses. 5/ Excludes farm households. Totals may not add due to rounding.

Information contact: Richard Kodl (202) 786-1808.

## Table 32.—Balance sheet of the U.S. farming sector

	Calendar years										
	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986 F
	\$ billion										
Assets											
Real estate *	453.5	507.7	600.7	704.2	779.2	780.2	745.6	736.1	639.6	559.6	504
Non-real estate	136.9	149.0	183.0	213.9	224.0	225.0	232.2	220.4	216.5	211.9	198
Livestock & poultry	29.0	31.9	51.3	61.4	60.6	53.5	53.0	49.7	49.6	45.9	45
Machinery & motor vehicles	63.9	69.9	78.2	90.8	96.8	103.0	103.7	100.9	95.0	92.2	89
Crops stored	22.1	24.8	28.0	33.5	36.5	36.1	40.6	33.2	33.7	37.1	30
Financial assets	21.9	22.4	25.5	28.2	30.1	32.4	34.9	36.5	38.1	36.7	35
Total farm assets	590.4	656.7	783.7	918.1	1,003.2	1,005.2	977.8	956.5	856.1	771.4	702
Liabilities											
Real estate	50.3	58.0	65.6	78.5	87.9	97.2	101.2	103.7	102.9	97.3	92
Non-real estate	46.6	52.4	66.4	76.7	82.5	91.6	102.4	98.7	95.8	94.8	94
CCC loans	1.0	4.5	5.7	5.1	5.0	8.0	15.4	10.8	8.6	16.9	20
Other non-real estate	45.6	52.4	60.7	71.6	77.5	83.6	87.0	87.9	87.1	77.9	72
Total farm liabilities	97.0	114.9	131.9	155.2	170.4	188.8	203.6	202.4	198.7	192.1	186
Total farm equity	493.5	541.8	651.8	762.9	832.9	816.4	774.2	754.0	657.3	579.3	516
	Percent										
Selected ratios											
Debt-to-assets	16.4	17.5	16.8	16.9	17.0	18.8	20.8	21.2	23.2 <sup>b</sup>	24.9	26.5
Debt-to-equity	18.6	20.0	19.3	19.6	19.7	23.1	26.3	26.8	30.2	33.2	36.1
Debt-to-net cash income	323.2	412.3	398.2	464.4	497.7	576.1	553.0	545.5	505.8 <sup>a</sup>	433.2	417.1

\* Excludes farm household. F = midpoint of forecast range.

Information contact: Richard Kodl (202) 786-1808.

Table 33.—Cash receipts from farm marketings, by States

State	Livestock and Products				Crops 1/				Total 1/			
	1984	1985	Oct 1986	Nov 1986	1984	1985	Oct 1986	Nov 1986	1984	1985	Oct 1986	Nov 1986
	\$ million 2/											
<b>North Atlantic</b>												
Maine	284	250	22	27	167	127	13	12	451	378	35	40
New Hampshire	77	71	6	6	33	36	3	4	110	107	9	10
Vermont	372	352	31	29	30	32	2	8	402	384	33	37
Massachusetts	131	124	10	11	258	265	16	19	389	389	26	30
Rhode Island	14	13	1	1	48	49	3	3	62	63	4	4
Connecticut	220	206	18	21	125	110	9	8	346	316	27	29
New York	1,921	1,845	157	155	745	719	70	69	2,666	2,564	227	224
New Jersey	135	144	12	12	404	447	35	36	538	591	47	48
Pennsylvania	2,242	2,184	181	176	848	966	78	88	3,090	3,150	259	264
<b>North Central</b>												
Ohio	1,626	1,511	138	137	1,989	2,450	264	330	3,614	3,940	402	467
Indiana	1,801	1,728	166	189	2,426	2,869	449	382	4,228	4,597	615	571
Illinois	2,173	2,063	186	223	4,482	5,704	613	678	6,655	7,768	799	900
Michigan	1,298	1,231	106	111	1,496	1,619	110	203	2,793	2,850	216	314
Wisconsin	4,075	4,100	348	353	878	1,012	89	161	4,953	5,111	436	514
Minnesota	3,360	3,370	326	312	2,728	3,102	276	520	6,088	6,472	602	832
Iowa	5,015	4,811	446	510	3,924	4,390	317	605	8,939	9,201	763	1,114
Missouri	2,166	1,930	199	240	1,530	1,738	201	262	3,696	3,668	400	502
North Dakota	693	686	86	81	1,839	2,060	251	204	2,532	2,746	336	284
South Dakota	1,804	1,903	199	174	1,021	1,076	110	185	2,826	2,979	309	359
Nebraska	4,524	4,113	468	423	2,510	3,093	257	438	7,035	7,206	724	861
Kansas	3,614	3,264	288	325	2,406	2,478	217	264	6,020	5,741	505	588
<b>Southern</b>												
Delaware	383	352	42	31	143	137	23	14	527	490	65	45
Maryland	810	770	75	63	369	378	42	36	1,179	1,148	118	99
Virginia	1,121	1,004	146	91	665	623	108	66	1,786	1,627	254	157
West Virginia	183	192	21	18	43	49	7	8	225	241	28	26
North Carolina	1,941	1,934	212	203	2,253	1,980	400	114	4,194	3,914	612	317
South Carolina	427	415	45	42	736	618	36	26	1,164	1,033	81	68
Georgia	1,848	1,727	176	156	1,772	1,600	215	129	3,620	3,327	391	284
Florida	1,091	1,015	85	76	3,642	3,726	146	191	4,733	4,741	231	268
Kentucky	1,415	1,352	102	251	1,288	1,519	75	166	2,703	2,871	177	417
Tennessee	1,054	1,000	106	90	1,051	1,057	112	159	2,105	2,057	218	248
Alabama	1,388	1,301	130	118	803	776	127	98	2,192	2,077	256	216
Mississippi	1,046	1,010	105	91	1,118	1,126	174	204	2,164	2,136	279	294
Arkansas	1,885	1,825	195	161	1,400	1,455	300	207	3,285	3,280	494	368
Louisiana	480	491	44	43	1,147	968	135	174	1,627	1,460	179	217
Oklahoma	1,776	1,726	210	178	879	938	65	59	2,655	2,664	275	238
Texas	5,901	5,443	527	468	3,569	3,857	276	245	9,470	9,298	803	713
<b>Western</b>												
Montana	717	802	119	141	649	405	69	59	1,366	1,207	188	200
Idaho	901	862	79	78	1,383	1,200	206	187	2,284	2,063	285	264
Wyoming	472	479	90	54	114	110	9	29	586	589	99	84
Colorado	2,205	2,019	195	207	1,141	1,145	75	116	3,345	3,164	270	323
New Mexico	657	718	101	101	334	369	29	43	991	1,086	130	144
Arizona	753	702	68	57	900	827	69	142	1,654	1,529	137	199
Utah	449	409	49	45	139	138	12	11	588	548	61	56
Nevada	172	144	16	9	79	78	7	8	251	222	23	17
Washington	1,031	932	74	70	2,100	1,865	210	140	3,132	2,797	285	210
Oregon	630	622	73	69	1,216	1,156	128	109	1,846	1,778	200	178
California	4,529	4,165	389	366	9,944	9,805	1,096	1,141	14,473	13,970	1,484	1,507
Alaska	7	8	1	1	18	18	2	2	25	26	3	3
Hawaii	87	83	7	7	463	458	42	40	550	540	49	47
<b>United States</b>	<b>72,905</b>	<b>69,401</b>	<b>6,876</b>	<b>6,800</b>	<b>69,248</b>	<b>72,702</b>	<b>7,574</b>	<b>8,403</b>	<b>142,153</b>	<b>142,103</b>	<b>14,450</b>	<b>15,203</b>

1/ Sales of farm products include receipts from commodities placed under CCC loans minus value of redemptions during the period. 2/ Estimates as of the end of current month. Rounded data may not add.

Information contact: Roger Strickland (202) 786-1804.



Table 34.—Cash receipts from farming

	Annual						1985	1986				
	1980	1981	1982	1983	1984	1985	Nov	July	Aug	Sept	Oct	Nov
	\$ million											
Farm marketings and CCC loans *	139,736	141,616	142,624	136,460	142,153	142,103	17,040	9,253	9,432	10,923	14,450	15,203
Livestock and products	67,991	69,151	70,249	69,453	72,905	69,401	6,431	5,927	6,104	6,033	6,876	6,800
Meat animals	41,233	39,748	40,917	38,893	40,832	38,185	3,697	2,876	3,238	3,304	4,053	3,931
Dairy products	16,365	18,095	18,254	18,757	17,944	18,135	1,431	1,494	1,487	1,446	1,502	1,470
Poultry and eggs	9,160	9,949	9,538	10,003	12,219	11,196	1,030	1,212	1,252	1,114	1,206	1,126
Other	1,233	1,358	1,560	1,800	1,910	1,885	273	344	128	169	115	272
Crops	71,746	72,465	72,375	67,007	69,248	72,702	10,609	3,326	3,328	4,891	7,574	8,403
Food grains	10,402	11,619	11,469	9,733	9,578	8,846	515	783	588	747	743	346
Feed crops	18,308	17,770	17,404	15,367	15,728	21,397	3,717	488	563	649	1,801	2,832
Cotton (lint and seed)	4,447	4,055	4,454	3,711	3,270	3,800	933	-63	-96	-132	524	847
Tobacco	2,672	3,250	3,342	2,768	2,841	2,722	189	6	298	404	271	176
Oil-bearing crops	15,493	13,853	13,812	13,530	13,861	12,237	2,768	309	235	917	1,964	1,801
Vegetables and melons	7,307	8,772	8,113	8,512	9,237	8,582	456	607	800	900	872	449
Fruits and tree nuts	6,557	6,603	6,821	6,062	6,787	6,812	865	748	505	708	692	732
Other	6,560	6,543	6,960	7,326	7,946	8,306	1,167	449	437	699	707	1,220
Government payments	1,286	1,932	3,492	9,295	8,430	7,704	40	-55	238	538	242	111
Total	141,022	143,548	146,116	145,755	150,583	149,807	17,080	9,198	9,670	11,461	14,692	15,314

\* Receipts from loans represent value of commodities placed under CCC loans minus value of redemptions during the month.

Information contact: Roger Strickland (202) 786-1804.

Table 35.—Farm production expenses, 1982-85

	Calendar years									
	1977	1978	1979	1980	1981	1982	1983	1984 R	1985	1986 P
	\$ million 2/									
Feed	13,967	16,036	19,314	20,971	20,855	18,592	21,725	19,850	19,588	18,816
Livestock	7,072	10,150	13,012	10,670	8,999	9,696	8,814	9,498	8,991	9,317
Seed	2,484	2,638	2,904	3,220	3,428	3,172	2,987	3,447	3,369	3,129
Farm-origin inputs	23,523	28,824	35,230	34,861	33,282	31,460	33,526	32,795	31,948	31,262
Fertilizer	6,529	6,619	7,369	9,490	9,409	8,018	7,067	7,429	7,258	6,390
Fuels and oils	4,356	4,609	5,635	7,879	8,570	7,888	7,503	7,143	6,584	5,193
Electricity	1,069	1,389	1,447	1,526	1,747	2,041	2,146	2,166	2,073	2,115
Pesticides	1,938	2,656	3,436	3,539	4,201	4,282	4,161	4,768	4,965	4,729
Manufactured inputs	13,892	15,273	17,887	22,434	23,927	22,229	20,877	21,506	20,882	18,426
Short-term interest	4,203	5,167	6,868	8,717	10,722	11,349	10,615	10,396	8,821	7,322
Real estate interest	4,329	5,060	6,190	7,544	9,142	10,481	10,815	10,733	9,878	8,753
Total interest charges	8,532	10,227	13,058	16,261	19,864	21,830	21,430	21,129	18,698	16,074
Repair and operation	5,430	6,638	7,280	7,648	7,587	7,730	7,543	7,850	7,450	7,303
Hired labor	7,131	8,279	8,982	9,294	8,932	10,182	9,660	9,838	10,347	10,883
Machine hire and custom work	1,682	1,776	2,063	1,823	1,984	2,025	1,896	2,170	2,185	2,057
Dairy deduction	0	0	0	0	0	0	633	656	163	431
Other operating expenses	6,129	7,703	9,047	9,378	9,865	10,700	10,646	10,860	11,522	11,260
Total operating expenses	20,372	24,396	27,732	28,143	28,368	30,637	30,378	31,374	31,667	31,934
Depreciation	15,493	16,963	19,345	21,474	23,573	23,886	23,491	23,020	21,101	19,784
Taxes	3,660	3,603	3,871	3,891	4,246	4,394	4,323	4,384	4,423	4,526
Net rent to non-operator										
landlord	3,412	3,963	6,182	6,075	6,184	6,219	5,441	7,504	7,387	6,945
Other overhead expenses	22,565	24,529	29,398	31,440	36,003	34,499	33,255	34,908	32,911	31,255
Total production expenses	88,884	103,249	123,305	133,139	139,444	140,654	139,466	141,712	136,108	128,951

1/ Includes operator household. 2/ Totals may not add due to rounding. R = revised. P = preliminary.

Information contact: Richard Kogl (202) 786-1808.

## Transportation

Table 36.—Rail rates; grain and fruit-vegetable shipments; truck costs

	Annual			1985	1986					
	1984	1985	1986 P	Dec	July	Aug	Sept	Oct	Nov	Dec
Rail freight rate index 1/										
(Dec 1984=100)										
All products	99.3	100.0	100.7	99.9	100.8	100.7	100.8 P	100.6 P	100.6 P	99.6 P
Farm products	98.7	99.0	99.6	98.8	100.3	99.9	99.6 P	99.1 P	99.1 P	98.4 P
Grain	98.6	98.3	98.9	98.0	99.2	99.2	99.2 P	98.4 P	98.4 P	97.6 P
Food products	99.1	100.1	100.1	100.1	99.6	99.6	99.6 P	99.6 P	99.4 P	98.2 P
Grain										
Rail carloadings (thou cars) 2/	27.2	22.8	24.3	23.5	24.4 P	24.2 P	27.0 P	32.7 P	29.8 P	24.7 P
Fresh fruit & vegetable shipments										
Piggy back (thou cart) 3/ 4/	570	601	620	482	727	514	471 P	524 P	486 P	479 P
Rail (thou cart) 3/ 4/	640	532	544	663	335	183	511 P	554 P	705 P	792 P
Truck (thou cart) 3/ 4/	8,006	8,298	8,489	8,250	8,945	7,848	6,096 P	8,162 P	8,511 P	8,101 P
Cost of operating trucks hauling produce 5/										
Owner operator (cts/mile)	115.5	116.1	113.1	119.0	111.8	111.8	111.8	111.8	112.4	113.0
Fleet operation (cts/mile)	115.3	116.7	113.6	119.9	112.1	112.1	112.2	112.4	113.0	113.5

1/ Department of Labor, Bureau of Labor Statistics, revised March 1985. 2/ Weekly average; from Association of American Railroads. 3/ Weekly average; from Agricultural Marketing Service, USDA. 4/ Preliminary data for 1985 and 1986. 5/ Office of Transportation, USDA. P = preliminary.

Information contact: T.Q. Hutchinson (202) 786-1840.

## Indicators of Farm Productivity

Table 37.—Indexes of farm production, input use, and productivity.

(See the Jan.-Feb. 1987 issue.)

Information contact: Charles Cobb (202) 786-1803.

Table 38.—Supply and use of fertilizer

(See the June 1986 issue, page 23.)

Information contact: Paul Andrienas (202) 786-1456.

Table 39.—Supply and use of major pesticides

(See the Oct. 1986 issue, page 25.)

Information contact: Stan Daberkow (202) 786-1458.

## Food Supply and Use

Table 40.—Per capita food consumption indexes (1967 = 100)

(See the Dec. 1986 issue, page 55.)

Information contact: Karen Bunch (202) 786-1870.

Table 41.—Per capita consumption of major food commodities (retail weight)

(See the Dec. 1986 issue, page 56.)

Information contact: Karen Bunch (202) 786-1870.



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